SONY

デジタルカラープリンター

DIGITAL COLOR PRINTER

UP-D2550
UP-D2500

SERVICE MANUAL

Vol. 2 (1st Edition)

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SECTION 7
SEMICONDUCTOR PIN ASSIGNMENTS

ここに記載されている半導体は，それぞれの機能を等価的に表したものです。　なお，互換性のない型名を併記していることがありますので，部品を交換するときは，Spare Partsの章を参照してください。
等価回路はICメーカーのデータブックに従いました。

Semiconductors of which functions are equivalent are described here. For parts replacement, refer to the section of Spare Parts in this manual. The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

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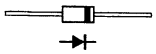
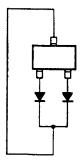
DIODE



10E-2
10E-2FD

—TOP VIEW—



1S2837-T1
1SS184

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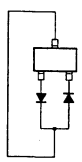

1SS123-T1
1SS226

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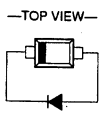

1SS352
1SS352-TPH3

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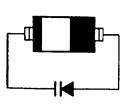

1T362A-M20E-T8A

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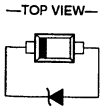

DTZ4.7C
UDZ-TE-17-4.7B

TRANSISTOR

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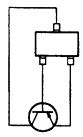
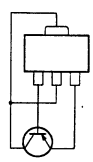


2SA1162G
2SA1226-E4
2SA1226-T1E3E4
2SA812-T1-M5M6

—TOP VIEW—



2SB798-DL
2SB798-T1DK

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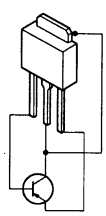

2SB962-Z-P
2SB962Z-T2P

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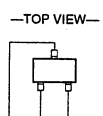

2SC1623
2SC1623-T1-L5L6

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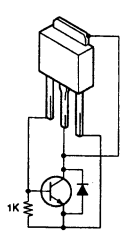

2SD992-Z
2SD992-Z-E2

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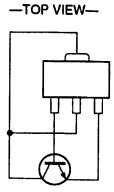

2SD999-CLCK
2SD999-T1-CLCK

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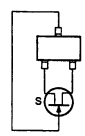
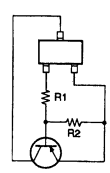


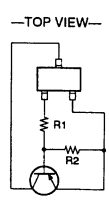
2SK160A-K26
2SK160A-T1K26

—TOP VIEW—



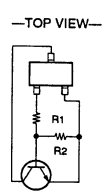
DTA124EKA-T146

—TOP VIEW—



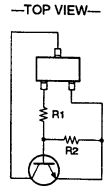
DTA144EKA-T146
(R1=47 K, R2=47 K)

—TOP VIEW—

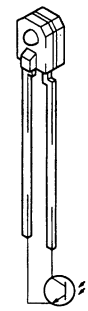


DTC114EKA-T146
(R1=10 K, R2=10 K)
DTC143TKA-T146
(ROHM) (R1=4.7 K, R2=OPEN)

—TOP VIEW—



DTC124EKA-T146 (R1, R2=22 K)
DTC144EKA-T146



PT480F

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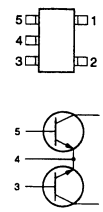
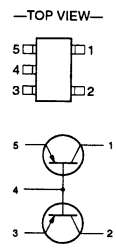


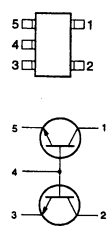
XN1501
XN1501-TX

—TOP VIEW—



XN2401
XN2401-TX

—TOP VIEW—



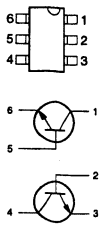
XN2501
XN2501-TX

TRANSISTOR, LED, OTHERS

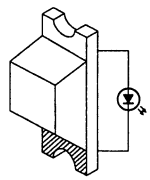
LED

OTHERS

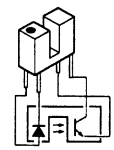
—TOP VIEW—



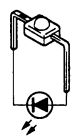
XN4501
XN4501-TW



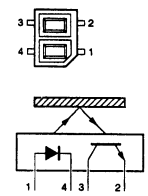
AA1101W ; ORANGE
PG1101W-TR ; GREEN



GP1S54
GP1S58V



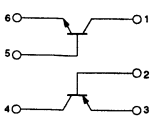
GL1EG111 ; YELLOWISH GREEN

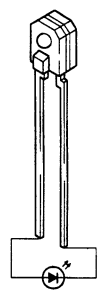


GP2S40K

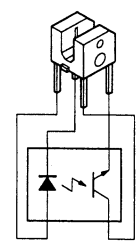
—TOP VIEW—

XN4601
XN4601-TW





GL480 ; INFRARED



RPI-352

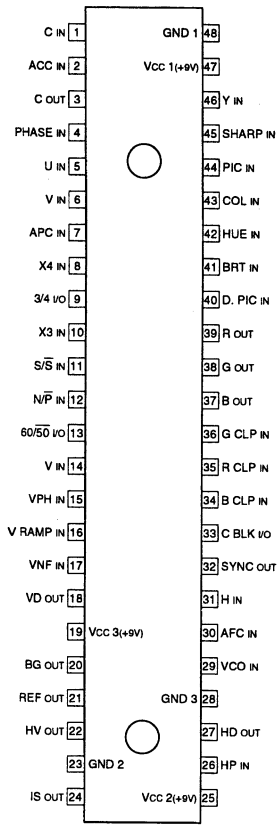
SLP-355B-51
SLP-655B-51

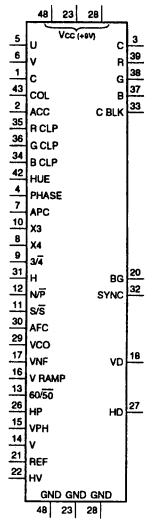
IC

CXA1213BS (SONY)

PAL/NTSC COLOR DECORDER

—TOP VIEW—





INPUT

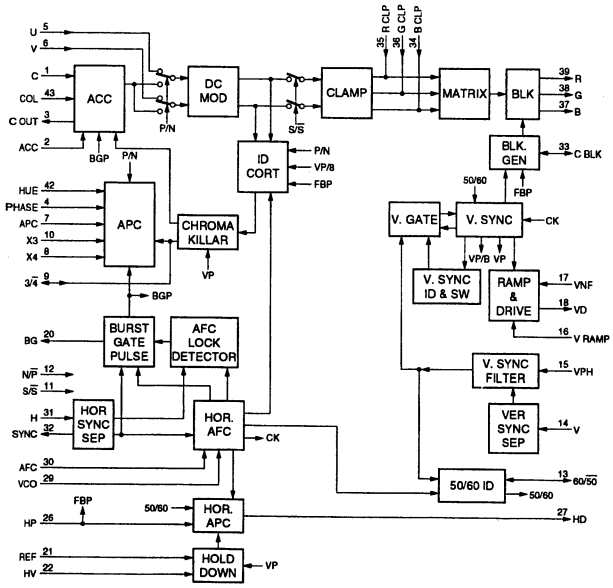
ACC	;	AUTO CHROMA CONTROL
AFC	;	AFC LOOP FILTER
APC	;	LAG LEAD FILTER
B CLP	;	B-Y SIGNAL COLOR CLAMP OR SECAM B-Y SIGNAL IN
BRT	;	BRIGHT CONTROL VOLTAGE
C	;	CHROMA IN
COL	;	COLOR CONTROL VOLTAGE
D. PIC	;	NEW DYNAMIC PICTURE BLACK PEAK HOLD
G CLP	;	G-Y SIGNAL COLOR CLAMP OUTPUT
H	;	HSYNC SEPARATOR
HP	;	FBP INPUT
HUE	;	NTSC HUE CONTROL VOLTAGE INPUT
N/P̄	;	NTSC/PAL
PHASE	;	PAL PHASE CONTROL
PIC	;	PICTURE CONTROL VOLTAGE
R CLP	;	R-Y SIGNAL COLOR CLAMP OR SECAM R-Y SIGNAL IN
SHARP	;	SHARPNESS CONTROL VOLTAGE
S/S̄	;	SECAM/SECAM
U	;	U SIGNAL
V	;	V SIGNAL
VCO	;	OSCILLATING ELEMENT CONNECT
V	;	VERTICAL SYNC SEPARATOR
VNF	;	VERTICAL DEFLECTION FEEDBACK
VPH	;	V SYNC SLICE LEVEL DETECT
V RAMP	;	VERTICAL DEFLECTION SAWTOOTH WAVEFORM GENERATE
X3	;	CHROMA VCO CRYSTAL (4.43MHz)
X4	;	CHROMA VCO CRYSTAL (4.43MHz)
Y	;	Y SIGNAL INPUT

OUTPUT

BG	;	GATE PULSE
B	;	B SIGNAL
C	;	CHROMA OUT
G	;	G SIGNAL
HD	;	HORIZONTAL DRIVE
HV	;	OVERVOLTAGE DETECT
IS	;	REFERENCE CURRENT GENERATE
REF	;	REFERENCE VOLTAGE
R	;	R SIGNAL
SYNC	;	SYNC WAVEFORM FORMATION
VD	;	FEED BACK WAVEFORM OR SAWTOOTH WAVEFORM COMPARATOR

INPUT/OUTPUT

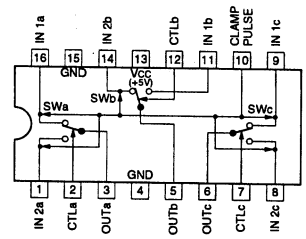
3/4̄	;	VCO OSCILLATE FREQUENCY DISCRIMINATOR INPUT (3.58MHz)/ OUTPUT (4.43MHz)
60/50̄	;	VERTICAL FREQUENCY 50Hz/60Hz DISCRIMINATOR INPUT (60Hz)/ OUTPUT (50Hz)
C BLK	;	C BLANKING INPUT OR BLANKING SIGNAL INPUT



BA7606F (ROHM)
BA7606F-T2

3-INNPUT VIDEO SWITCH FOR VTR

—TOP VIEW—

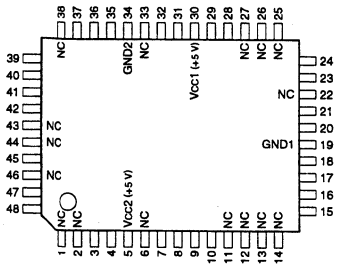


CLT	OUT
0	IN 2
1	IN 1

0 ; LOW LEVEL
1 ; HIGH LEVEL

CXA1437Q (SONY)

PULSE GENERATOR
—TOP VIEW—



(Vcc = +5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	—	NC	13	—	NC	25	—	NC	37	I	SYNC SEP
2	—	NC	14	—	NC	26	—	NC	38	—	NC
3	—	HD TC	15	O	VD	27	—	NC	39	—	SYNC SEP TC2
4	O	$\overline{HD}$	16	O	ID	28	O	SW	40	O	C. SYNC
5	—	Vcc2	17	—	ID S/H	29	—	AGC REF	41	I	PB/REC
6	—	NC	18	I	ID	30	—	Vcc1	42	I	fsc
7	—	I REF	19	—	GND1	31	I	REF Y	43	—	NC
8	—	VD TC	20	O	AGC OUT	32	—	PEAK AGC HOLD	44	—	NC
9	O	BFP	21	I	AGC DET	33	—	NC	45	I	NTSC/PAL
10	—	BFP TC	22	—	NC	34	—	GND2	46	—	NC
11	—	NC	23	—	SYNC AGC HOLD	35	I	PB Y	47	O	L. ALT
12	—	NC	24	I	AGC	36	—	SYNC SEP TC1	48	O	$\overline{BLK}$

INPUT

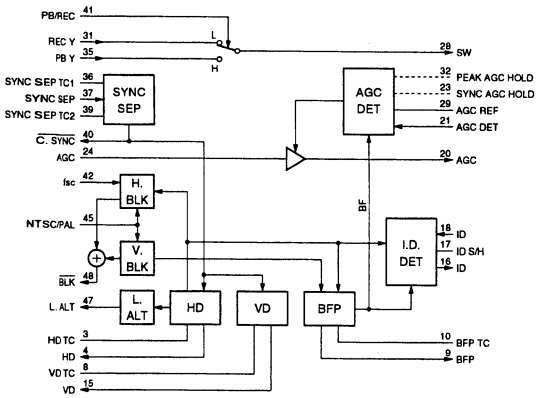
AGC DET	; AGC DET
AGC	; AGC
fsc	; H BLK fsc (Y: NONSYNC)
ID	; ID DET (L: R-Y, H: B-Y)
NTSC/PAL	; BLK NTSC/PAL SWITCH (L: NTSC, H: PAL)
PB/REC	; PB/REC SWITCH (L: PB, H: REC)
PB Y	; PB Y SWITCH
REC Y	; REC Y SWITCH
SYNC SEP	; SYNC SEPARATOR

OUTPUT

AGC	; AGC
$\overline{BFP}$	; BFP (BLANKING SIGNAL IN V BLK)
$\overline{BLK}$	; COMPOSITE BLANKING SIGNAL
$\overline{C. SYNC}$	; C. SYNC
$\overline{HD}$	; HD PULSE
ID	; ID DETECT (PLAYBACK COLOR DIFFERENCE SIGNAL) (L: R-Y, H: B-Y)
L. ALT	; HD 1/2 COUNT DOWN
SW	; SWITCH
VD	; VD PULSE

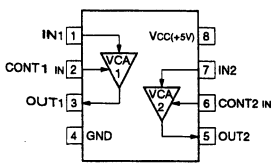
OTHER

AGC REF	; AGC LEVEL ADJUSTMENT
BFP TC	; BFP TIME CONSTANT
HD TC	; HALF H KILLER MONO-MULTI TIME CONSTANT
ID S/H	; ID DET SAMPLE HOLD CAPACITOR
I REF	; REFERENCE CURRENT (VD, HD, BFP TIME CONSTANT)
PEAK AGC HOLD	; PEAK AGC TIME CONSTANT
SYNC AGC HOLD	; SYNC AGC TIME CONSTANT
SYNC SEP TC1	; SYNC TIP POSITION DETECT
SYNC SEP TC2	; FEED BACK CLAMP TIME CONSTANT
VD TC	; VD DET TIME CONSTANT



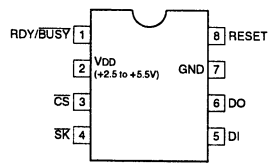
CXA1211M (SONY)
CXA1211M-T4

ELECTRONIC VOLUME
—TOP VIEW—



AK6420AF-E2 (ASAHI KASEI MICRO SYSTEM)

C-MOS 2048 (128 x 16)-BIT ELECTRICALLY ERASABLE PROM
—TOP VIEW—

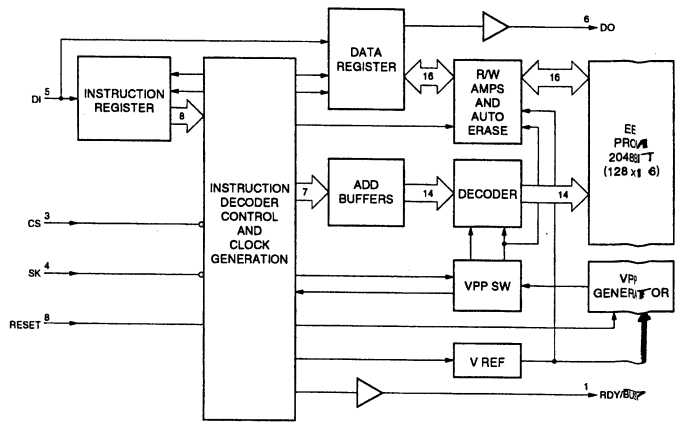


INPUT

$\overline{CS}$	; CHIP SELECT
DI	; DATA INPUT
RESET	; RESET
$\overline{SK}$	; SERIAL CLOCK

OUTPUT

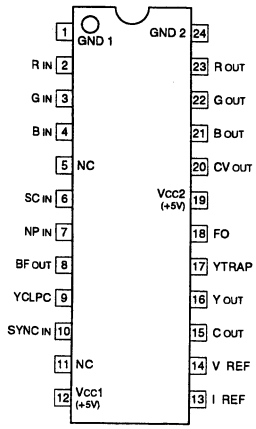
DO	; DATA OUTPUT
RDY/$\overline{BUSY}$	; READY/BUSY

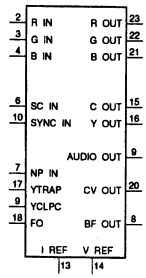


UP-D2550(J)
UP-D2500(UC,CE)

CXA1645M (SONY)FLAT PACKAGE
CXA1645M-T6

RGB COMPOSITE ENCODER
—TOP VIEW—





INPUT

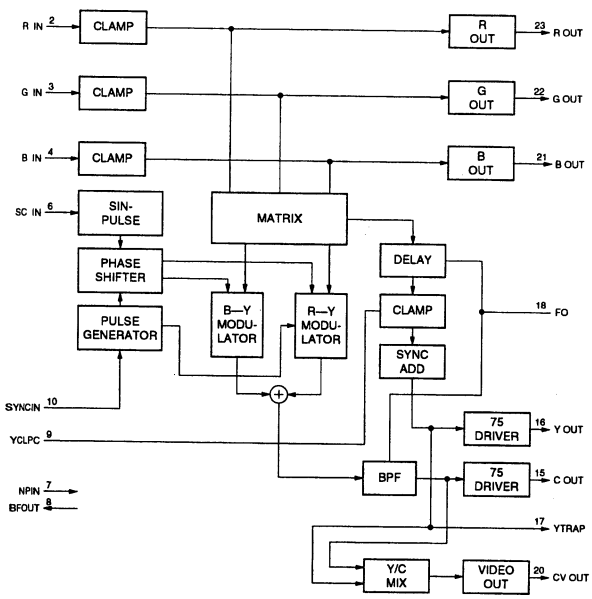
B IN	; ANALOG B
G IN	; ANALOG G
NP IN	; NTSC/PAL MODE SELECT
R IN	; ANALOG R
SC IN	; SUB-CARRIER
SYNC IN	; COMPOSITE SYNC SIGNAL

OUTPUT

B OUT	; ANALOG B
BF OUT	; BF PULSE FOR MONITOR
C OUT	; CHROMA SIGNAL
CV OUT	; COMPOSITE VIDEO
G OUT	; ANALOG G
R OUT	; ANALOG R
Y OUT	; Y SIGNAL

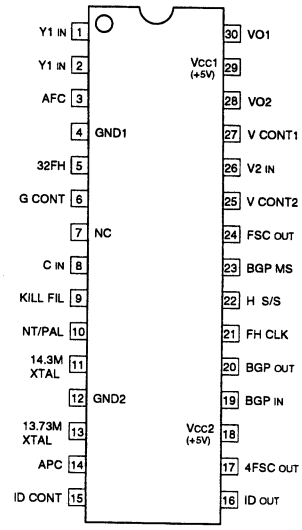
OTHER

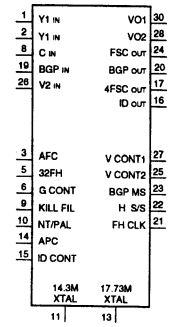
FO	; fo ADJUST FOR INNER FILTER
IREF	; REFFERENCE CURRENT
VREF	; REFFERENCE VOLTAGE
YCLPC	; Y SIGNAL CLAMP CAPACITOR
YTRAP	; Y SIGNAL CROSS-COLOR TRAP



CXA1686M (SONY)FLAT PACKAGE
CXA1686M-T6

4FSC CLOCK GENERATOR
—TOP VIEW—



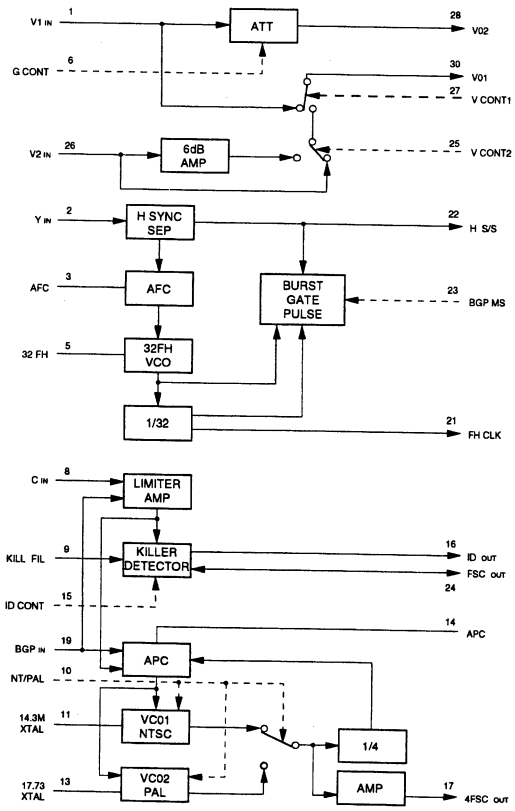


INPUT

V1 IN	; VIDEO INPUT
Y IN	; Y INPUT
C IN	; CHROMA INPUT
BGP IN	; BURST GATE PULSE INPUT
V2 IN	; VIDEO 2 INPUT

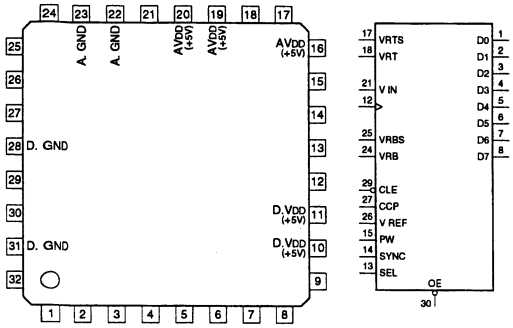
OUTPUT

ID OUT	; KILLER ID DISTINCTION OUTPUT
BGP OUT	; BURST GATE PULSE OUTPUT
FH CLK	; FH CLOCK OUTPUT
H S/S	; H SYNC SEP OUTPUT
FSC OUT	; NTSC/PAL FSC CLOCK OUTPUT
VO2	; VIDEO 2 OUTPUT
VO1	; VIDEO 1 OUTPUT



CXD1176Q (SONY)
CXD1176Q-T4

C-MOS 8-BIT 20MSPS VIDEO A / D CONVERTER
—TOP VIEW—



(A VDD, D VDD = +5V)

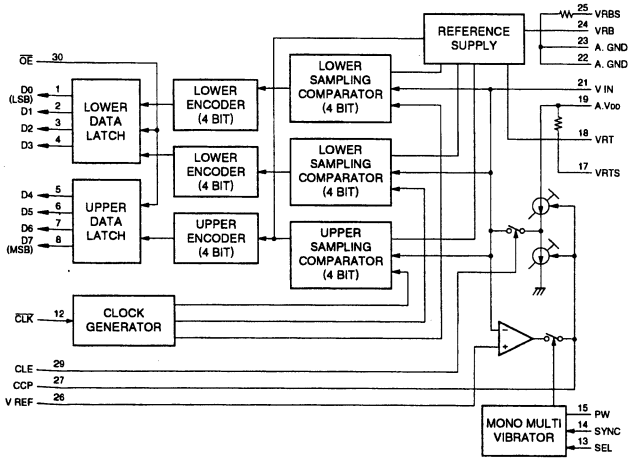
PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	D0(LSB)	17	I	VRTS
2	O	D1	18	I	VRT
3	O	D2	19	—	A.VDD
4	O	D3	20	—	A.VDD
5	O	D4	21	I	V IN
6	O	D5	22	—	A. GND
7	O	D6	23	—	A .GND
8	O	D7(MSB)	24	I	VRB
9	—	NC	25	I	VRBS
10	—	D.VDD	26	I	VREF
11	—	D.VDD	27	I	CCP
12	I	CLK	28	—	D GND
13	I	SEL	29	I	$\overline{CLE}$
14	I	SYNC	30	I	$\overline{OE}$
15	I	PW	31	—	D GND
16	—	A.VDD	32	—	NC

INPUT

CCP	;	CLAMP CONTROL VOLTAGE FOR INTEGRATOR
$\overline{CLE}$	;	CLAMP ENABLE
CLK	;	CLOCK
CLP	;	CLAMP PULSE
$\overline{OE}$	;	OUTPUT ENABLE
PW	;	PULSE WIDTH FOR MONO MULTI
SEL	;	TRIGGER SELECT
SYNC	;	TRIGGER PULSE FOR MONO MULTI VIBRATOR
V IN	;	ANALOG
VRB	;	REFERENCE VOLTAGE (BOTTOM)
VRBS	;	SELF REFERENCE VOLTAGE SHORT (+0.5 V/BOTTOM)
VREF	;	VOLTAGE REFERENCE FOR CLAMP
VRT	;	REFERENCE VOLTAGE (TOP)
VRTS	;	SELF REFERENCE VOLTAGE SHORT (+2.6 V/TOP)

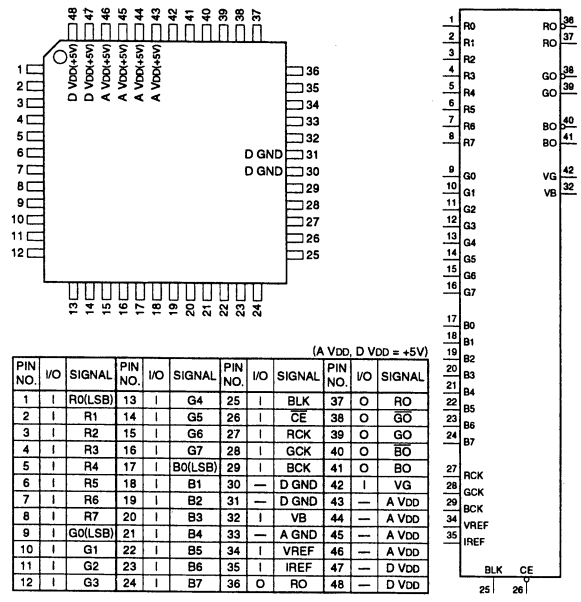
OUTPUT

D0 - D7 ; DATA



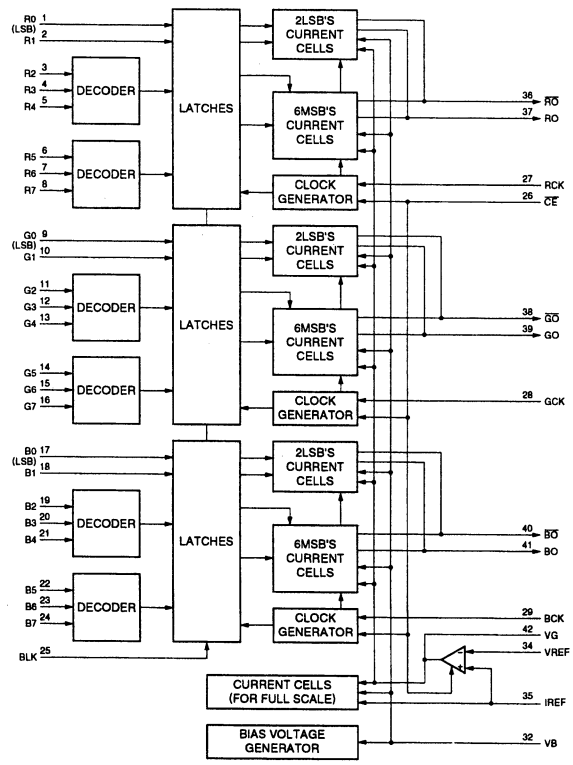
CXD1178Q (SONY)
CXD1178Q-T6

C-MOS 3CH 8-BIT 40MHz D / A CONVERTER
—TOP VIEW—



(A VDD, D VDD = +5V)

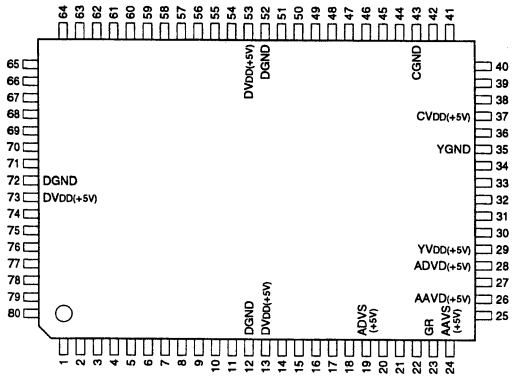
PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I	R0(LSB)	13	I	G4	25	I	BLK	37	O	RO
2	I	R1	14	I	G5	26	I	$\overline{CE}$	38	O	$\overline{GO}$
3	I	R2	15	I	G6	27	I	RCK	39	O	GO
4	I	R3	16	I	G7	28	I	GCK	40	O	$\overline{BO}$
5	I	R4	17	I	B0(LSB)	29	I	BCK	41	O	BO
6	I	R5	18	I	B1	30	—	D GND	42	I	VG
7	I	R6	19	I	B2	31	—	D GND	43	—	A VDD
8	I	R7	20	I	B3	32	I	VB	44	—	A VDD
9	I	G0(LSB)	21	I	B4	33	—	A GND	45	—	A VDD
10	I	G1	22	I	B5	34	I	VREF	46	—	A VDD
11	I	G2	23	I	B6	35	I	IREF	47	—	D VDD
12	I	G3	24	I	B7	36	O	RO	48	—	D VDD

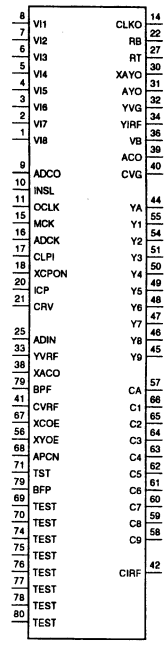


CXD2023Q (SONY)

C-MOS DIGITAL COMB FILTER

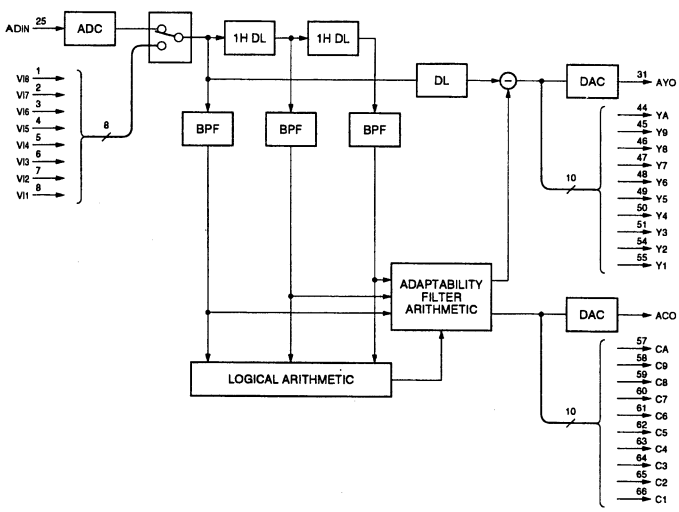
—TOP VIEW—





(VDD = +5V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	VI8	21	I	CRV	41	I	CVRF	61	O	C6
2	I	VI7	22	O	RB	42	O	CIRF	62	O	C5
3	I	VI6	23	—	GR	43	—	CGND	63	O	C4
4	I	VI5	24	—	AAVS	44	O	YA	64	O	C3
5	I	VI4	25	I	ADIN	45	O	Y9	65	O	C2
6	I	VI3	26	—	AAVD	46	O	Y8	66	O	C1
7	I	VI2	27	O	RT	47	O	Y7	67	I	XCOE
8	I	VI1	28	—	ADVD	48	O	Y6	68	I	APCN
9	I	ADCO	29	—	YVDD	49	O	Y5	69	I	TEST
10	I	INSL	30	O	XAYO	50	O	Y4	70	I	TEST
11	I	OCLK	31	O	AYO	51	O	Y3	71	I	TST
12	—	DGND	32	O	YVG	52	—	DGND	72	—	DGND
13	—	DVDD	33	I	YVRF	53	—	DVDD	73	—	DVDD
14	O	CLKO	34	O	YIRF	54	O	Y2	74	I	TEST
15	I	MCK	35	—	YGND	55	O	Y1	75	I	TEST
16	I	ADCK	36	O	VB	56	I	XYOE	76	I	TEST
17	I	CLPI	37	—	CVDD	57	O	CA	77	I	TEST
18	I	XCPON	38	I	XACO	58	O	C9	78	I	TEST
19	—	ADVS	39	O	ACO	59	O	C8	79	I	BPF
20	I	ICP	40	O	CVG	60	O	C7	80	I	TEST



INPUT

ADCK	; AD CONVERTER CLOCK
ADCO	; H : AD CONVERTER L : USUALLY MODE
ADIN	; COMB FILTER ANALOG
APCN	; APERTURE CORRECTION H : APERTURE EFFECT L : STANDARD MODE
BPF	; H : BPF SEPARATION FIXATION L : STANDARD MODE
CLPI	; AD CONVERTER CLAMP PULSE
CRV	; CLAMP REFERENCE VOLTAGE
CVRF	; ANALOG CHROMA SIGNAL
ICP	; CLAMP CONTROL
INSL	; INPUT SELECT H : DIGITAL INPUT L : ANALOG INPUT
MCK	; CLOCK
OCLK	; CLOCK AMP.
TEST	; TEST
TST	; Y OUTPUT SLEW MODE H : COMPOSITE VIDEO SIGNAL L : Y/C SEPARATION MODE
VI1 - VI8	; DIGITAL INPUT
XACO	; ACO INVERT CURRENT
XCPON	; H : CLAMP FUNCTION "OFF" L : CLAMP FUNCTION
XCOE	; DIGITAL CHROMA SIGNAL CONTROL H : HIGH IMPEDANCE L : ENABLE
XYOE	; DIGITAL Y SIGNAL CONTROL H : HIGH IMPEDANCE L : ENABLE
YVRF	; ANALOG Y SIGNAL

OUTPUT

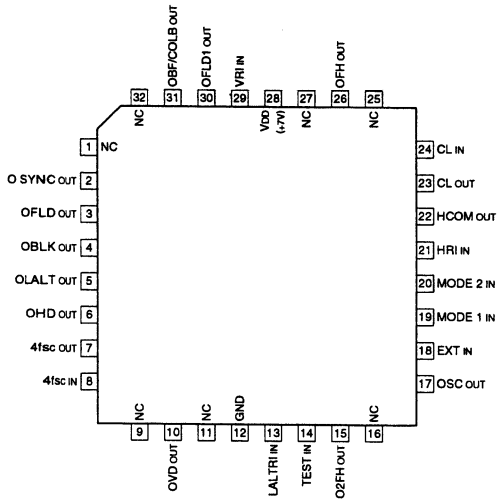
ACO	; ANALOG CHROMA SIGNAL
AYO	; ANALOG Y SIGNAL
CA, C1 - C9	; DIGITAL CHROMA SIGNAL
CIRF	; SETTING FOR ANALOG CHROMA OUTPUT
CLKO	; CLOCK AMP.
CVG	; VOLTAGE FOR ANALOG CHROMA SIGNAL
RB	; REFERENCE VOLTAGE (BOTTOM) STANDARD (0.5V)
RT	; REFERENCE VOLTAGE (TOP) STANDARD (2.6V)
VB	; VOLTAGE BIAS
XAYO	; AYO INVERT CURRENT
YA, Y1 - Y9	; DIGITAL Y SIGNAL
YIRF	; SETTING FOR ANALOG Y OUTPUT
YVG	; VOLTAGE FOR ANALOG Y SIGNAL

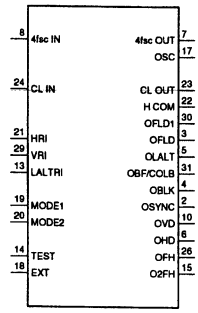
OTHER

AAVD	; AD CONVERTER ANALOG POWER
AAVS	; AD CONVERTER ANALOG GND
ADVS	; AD CONVERTER DIGITAL GND
ADVD	; AD CONVERTER DIGITAL POWER
GR	; GARD RING
CVSS	; C/DA CONVERTER GND
CVDD	; C/DA CONVERTER POWER
YVDD	; Y/DA CONVERTER POWER
YVSS	; Y/DA CONVERTER ANALOG GND

CXD1217Q (SONY)
CXD1217Q-T4

C-MOS SYNC GENERATOR
—TOP VIEW—





SYSTEM	4fsc	CLOCK
NTSC	910fH	910fH
PAL	1135fH + 2fV	908fH
PALM	909fH	910fH
SECAM	—	908fH

INPUT		SYSTEM
MODE1	MODE2	
0	0	NTSC
0	1	SECAM
1	0	PALM
1	1	PAL

0 ; LOW LEVEL
1 ; HIGH LEVEL

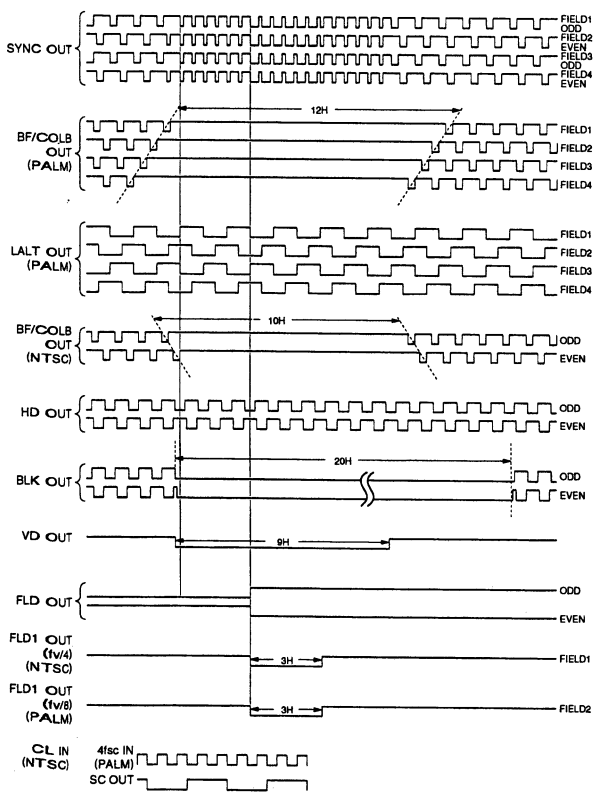
INPUT

4fsc IN	; 4fsc
CL IN	; CLOCK
EXT	; SYNC MODE SELECT (L : INTERNAL/H : EXTERNAL)
HRI	; HORIZONTAL RESET
LALTRI	; LINE ALTERNATE RESET
MODE1, 2	; SYSTEM SELECT
VRI	; VERTICAL RESET

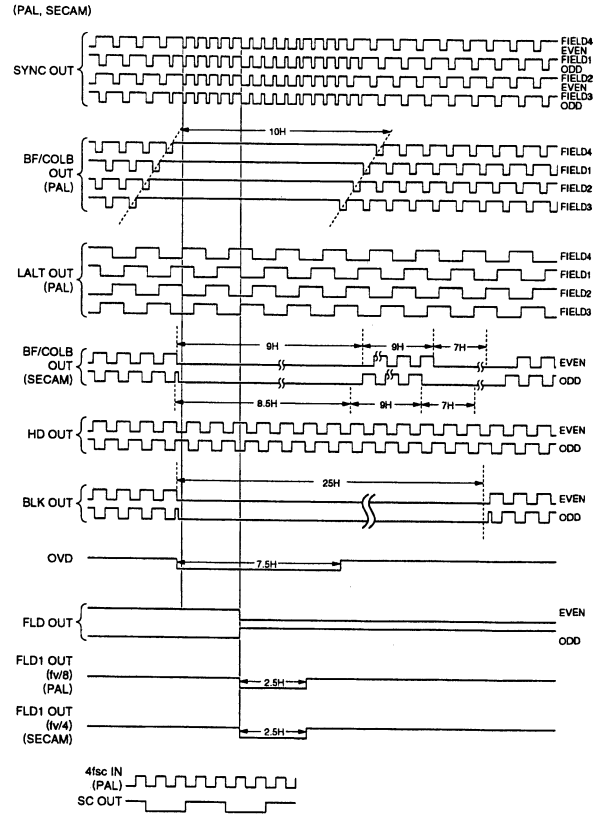
OUTPUT

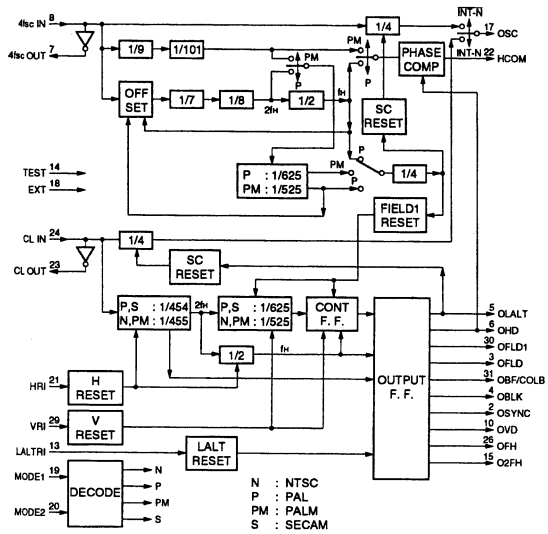
4fsc OUT	; 4fsc
CL OUT	; CLOCK
HCOM	; PHASE COMPARATOR
O2FH	; 2fH
OBF/COLB	; BURST FLAG/COLOR BLANKING
OBLK	; COMPOSITE BLANKING
OFH	; fH
OFLD	; FIELD PULSE
OFLD1	; FIELD1
OHD	; HORIZONTAL DRIVE
OLALT	; LINE ALTERNATE
OSC	; SUBCARRIER
OSYNC	; COMPOSITE SYNC
OVD	; VERTICAL DRIVE

(NTSC, PALM)



(PAL, SECAM)

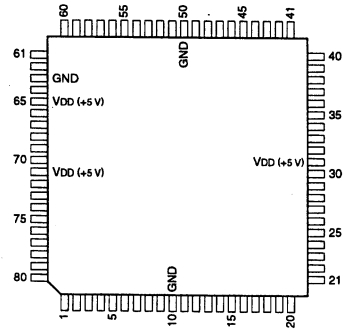




CXD8636Q (SONY)

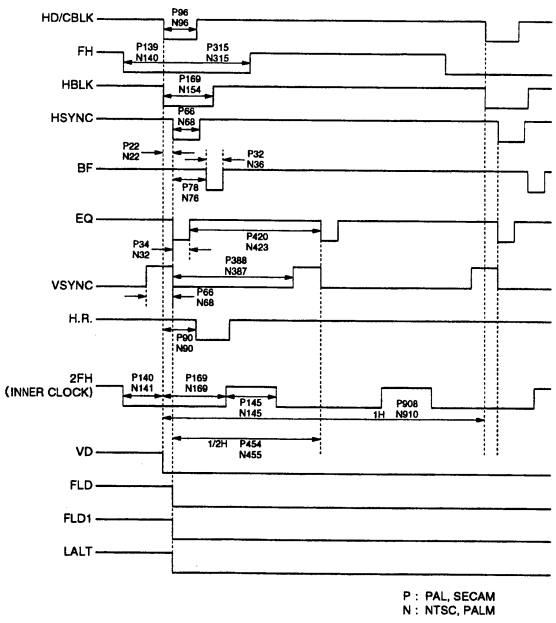
C-MOS GATE ARRAY

—TOP VIEW—



(VDD = +5 V)

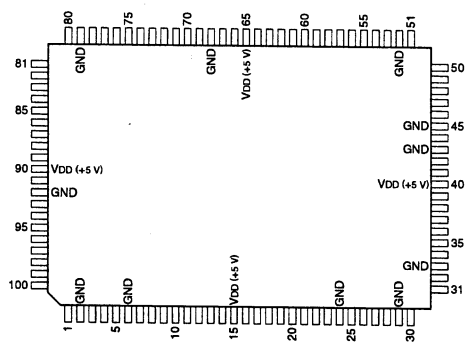
PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL
1	I	TSTSEL	17	O	TSTCOMPA5	33	O	TDATA9	49	I	DCLK	65	—	VDD
2	I	TSTLOAD	18	O	TSTCOMPA6	34	O	TDATA10	50	—	GND	66	I	ICSEL2
3	O	NHEADACTIVE	19	O	TSTCOMPA7	35	O	TDATA11	51	I	NDMAON	67	I	ICSEL1
4	O	PRINTPULSE	20	O	TDATA8	36	O	TDATA12	52	O	NDMAREQ	68	I	ICSEL0
5	I	PORTENABLE0	21	O	HDDATA1	37	O	TDATA13	53	O	TDATA14	69	O	NCLATCH
6	I	PORTENABLE1	22	O	HDDATA2	38	I	NRESET	54	O	TDATA15	70	O	NUMBER0
7	I	PORTENABLE2	23	O	HDDATA3	39	I	NHEADACTIVEF	55	I	TADD2	71	—	VDD
8	I	PRINTTYPE0	24	O	HDDATA4	40	I	PRINTPULSEF	56	I	TADD3	72	O	NUMBER1
9	I	PRINTTYPE1	25	O	HDDATA5	41	I	DATA7	57	I	PRINTPULSEI	73	O	NUMBER2
10	—	GND	26	O	HDDATA6	42	I	DATA6	58	I	NHEADACTIVEI	74	O	NUMBER3
11	I	TESTSEL	27	O	HDDATA7	43	I	DATA5	59	I	TADD4	75	O	NUMBER4
12	O	TSTCOMPA0	28	O	HDDATA8	44	I	DATA4	60	I	TADD5	76	O	NUMBER5
13	O	TSTCOMPA1	29	O	NHDLATCH	45	I	DATA3	61	I	TADD6	77	O	NUMBER6
14	O	TSTCOMPA2	30	O	HDCLK	46	I	DATA2	62	I	CLK1S4	78	O	NUMBER7
15	O	TSTCOMPA3	31	—	VDD	47	I	DATA1	63	—	GND	79	O	NUMBER8
16	O	TSTCOMPA4	32	O	NHDSTB	48	I	DATA0	64	I	CLK	80	O	NUMBER9



CXD8653Q (SONY)

C-MOS PICTURE QUALITY CONTROL

—TOP VIEW—



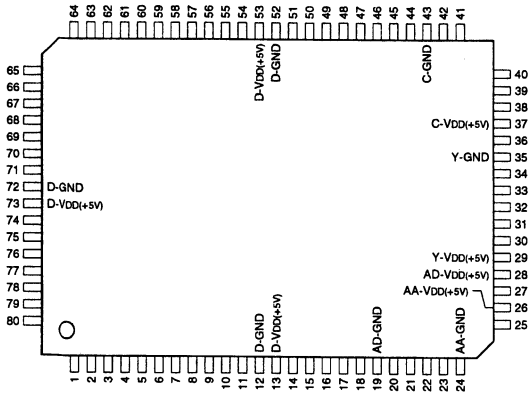
(VDD = +5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	NRES	21	I/O	DB5	41	O	PD1	61	O	STS8	81	I	FD0
2	—	GND	22	I/O	DB6	42	O	PD0	62	O	STS9	82	I	FD1
3	I	NCS	23	I/O	DB7	43	—	GND	63	O	STS10	83	I	FD2
4	I	NRD	24	—	GND	44	O	PDCK	64	O	STS11	84	I	FD3
5	I	NWR	25	I	NHAIN	45	—	GND	65	—	VDD	85	I	FD4
6	—	GND	26	I	PPIN	46	O	PDACT	66	O	XO	86	I	FD5
7	I	ADB0	27	O	STS0	47	I	PDREQ	67	I	XI	87	I	FD6
8	I	ADB1	28	O	STS1	48	I	TIN1	68	—	GND	88	I	FD7
9	I	ADB2	29	—	GND	49	I	TIN2	69	O	STS12	89	I	TIN8
10	I	ADB3	30	I	TIN0	50	I	TIN3	70	O	STS13	90	—	VDD
11	I	ADB4	31	O	PPOUT	51	I	TIN4	71	O	STS14	91	I	FDOC
12	I	ADB5	32	O	NHAOUT	52	—	GND	72	O	STS15	92	—	GND
13	I	ADB6	33	—	GND	53	I	TIN5	73	O	STS16	93	O	FDREQ
14	I	ADB7	34	O	PD7	54	I	TIN6	74	O	STS17	94	I	TIN10
15	—	VDD	35	O	PD6	55	O	STS2	75	O	STS18	95	I	TIN11
16	I/O	DB0	36	O	PD5	56	O	STS3	76	I	HNUM0	96	I	TIN12
17	I/O	DB1	37	O	PD4	57	O	STS4	77	I	HNUM1	97	I	TIN13
18	I/O	DB2	38	O	PD3	58	O	STS5	78	I	TIN7	98	I	NTES1
19	I/O	DB3	39	O	PD2	59	O	STS6	79	—	GND	99	I	NPRE1
20	I/O	DB4	40	—	VDD	60	O	STS7	80	I	TIN8	100	I	TIN14

CXD2024AQ (SONY)

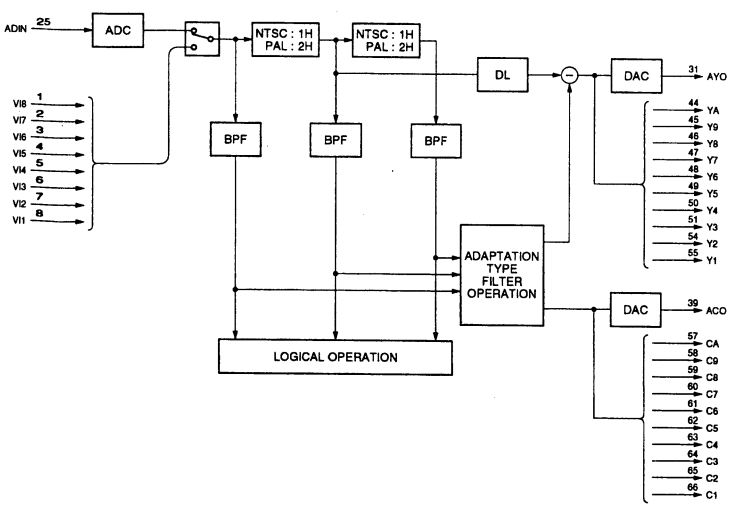
C-MOS DIGITAL COMB FILTER (NTSC/PAL)

—TOP VIEW—



(VDD = +5V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	VI8	21	I	CRV	41	I	CVRF	61	O	C6
2	I	VI7	22	O	RB	42	O	CIRF	62	O	C5
3	I	VI6	23	—	GR	43	—	C-GND	63	O	C4
4	I	VI5	24	—	AA-GND	44	O	YA	64	O	C3
5	I	VI4	25	I	ADIN	45	O	Y9	65	O	C2
6	I	VI3	26	—	AA-VDD	46	O	Y8	66	O	C1
7	I	VI2	27	O	RT	47	O	Y7	67	I	XCOE
8	I	VI1	28	—	AD-VDD	48	O	Y6	68	I	APCN
9	I	ADC0	29	—	Y-VDD	49	O	Y5	69	I	RATI
10	I	INSL	30	I	XAYO	50	O	Y4	70	I	NTPL
11	I	OCLK	31	O	AYO	51	O	Y3	71	I	TST
12	—	D-GND	32	O	YVG	52	—	D-GND	72	—	D-GND
13	—	D-VDD	33	I	YVRF	53	—	D-VDD	73	—	D-VDD
14	O	CLKO	34	O	YIRF	54	O	Y2	74	I	PNR
15	I	MCK	35	—	Y-GND	55	O	Y1	75	I	TEST
16	I	ADCK	36	O	VB	56	I	XYOE	76	I	TEST
17	I	CLPI	37	—	C-VDD	57	O	CA	77	I	TEST
18	I	XCPON	38	I	XACO	58	O	C9	78	I	TEST
19	—	AD-GND	39	O	ACO	59	O	C8	79	I	BPF
20	I	ICP	40	O	CVG	60	O	C7	80	I	TEST



INPUT

ADCK ; CLOCK FOR A/D CONVERTER
ADCO ; A/D CONVERTER OUTPUT SELECT
(H : DIGITAL OUTPUT MODE, L : STANDARD MODE)
ADIN ; COMB FILTER ANALOG DATA
APCN ; APERTURE COMPENSATION
(H : FREQUENCY RESPONSE DEGRADATION COMPENSATE BY APERTIRE EFFECT, L : STANDARD)
BPF ; Y/C SEPARATE PROCESS MODE SETTING
(H : BPF SEPARATE MODE, L : ADAPTABILITY PROCESS MODE)
CLPI ; CLAMP PULSE FOR A/D CONVERTER
CRV ; CLAMP REFERENCE VOLTAGE
CVRF ; FULL SCALE VALUE SETTING OF ANALOG CHROMA SIGNAL
ICP ; VOLTAGE INTERGRATION FOR CLAMP CONTROL
INSL ; INPUT DATA SELECT OF COMB FILTER (H : DIGITAL INPUT, L : ANALOG INPUT)
MCK ; MASTER CLOCK
NTPL ; NTSC/PAL MODE SETTING (H : PAL, L : NTSC)
OCLK ; CLOCK AMPLIFIER
PNR ; DOT INTERFERENCE (PAL H : MINIMUM, L : BEFORE IMPROVEMENT NTSC : L FIXED)
RATI ; RATIO SETTING (H : PAL (WHEN THE PNR IS ON, SET TO L FORCED), L : NTSC)
TEST ; TEST (NORMAL : L FIXED)
TST ; Y OUTPUT THROUGH MODE
(H : COMPOSITE VIDEO SIGNAL (TO AYO, YA-Y1) AND Y/C SEPARATED CHROMA SIGNAL (TO ACO, CA-C1), L : Y-C SEPARATION MODE)
VI1 - VI8 ; DIGITAL DATA
XACO ; ANALOG CHROMA SIGNAL REVERSE CURRENT (CONNECTED TO C-GND)
XAYO ; ANALOG Y SIGNAL REVERSE CURRENT (CONNECTED TO Y-GND)
XCOE ; DIGITAL CHROMA SIGNAL OUTPUT CONTROL
(H : HIGH IMPEDANCE, L : STANDARD OUTPUT)
XCPON ; CLAMP SETTING FOR A/D CONVERTER
(H : A/D CONVERTER CAPABILITY, L : CLAMP CAPABILITY)
XYOE ; DIGITAL Y SIGNAL OUTPUT CONTROL
(H : HIGH IMPEDANCE, L : STANDARD OUTPUT)
YVRF ; FULL SCALE VALUE SETTING OF ANALOG Y SIGNAL

OUTPUT

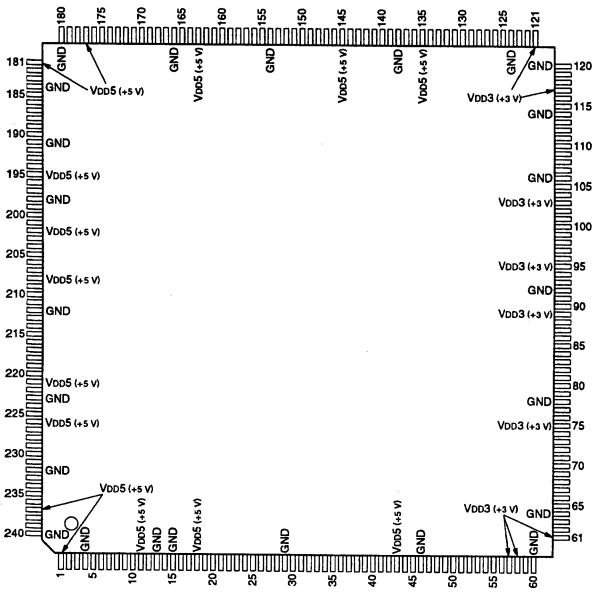
ACO ; ANALOG CHROMA SIGNAL
AYO ; ANALOG Y SIGNAL
C1 - C9 ; DIGITAL CHROMA SIGNAL
CA ; DIGITAL CHROMA SIGNAL
CIRF ; EXTERNAL RESISTOR CONNECTION
CLKO ; CLOCK AMPLIFIER
CVG ; EXTERNAL CAPACITOR CONNECTION
RB ; STANDARD VALUE (+0.5V) OF REFERENCE VOLTAGE (BOTTOM)
RT ; STANDARD VALUE (+2.6V) OF REFERENCE VOLTAGE (TOP)
VB ; EXTERNAL CAPACITOR
Y1 - Y9 ; DIGITAL Y SIGNAL
YA ; DIGITAL Y SIGNAL
YIRF ; EXTERNAL RESISTOR CONNECTION
YVG ; EXTERNAL CAPACITOR CONNECTION

VDD (SUPPLY VOLTAGE = +5V)
AA-VDD ; ANALOG SUPPLY VOLTAGE FOR A/D CONVERTER
AD-VDD ; DIGITAL SUPPLY VOLTAGE FOR A/D CONVERTER
C-VDD ; ANALOG SUPPLY VOLTAGE FOR D/A CONVERTER (CHROMA)
D-VDD ; DIGITAL SUPPLY VOLTAGE
Y-VDD ; ANALOG SUPPLY VOLTAGE FOR D/A CONVERTER (Y)

GND
AA-GND ; ANALOG GND FOR A/D CONVERTER
AD-GND ; DIGITAL GND FOR A/D CONVERTER
C-GND ; ANALOG GND FOR D/A CONVERTER (CHROMA)
D-GND ; DIGITAL GND
GR ; GARD RING (CONNECTED TO AA-GND)
Y-GND ; ANALOG GND FOR D/A CONVERTER (Y)

CXD8665Q (SONY)

C-MOS DYNAMIC RAM CONTROL
—TOP VIEW—

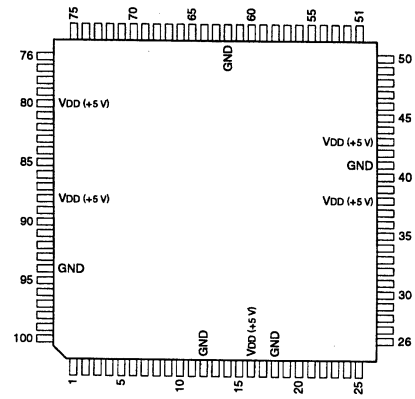


(VDD3 = +3 V, VDD5 = +5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	—	VDD5	49	O	DRAMADR2	97	I/O	GDRAMD1	145	—	VDD5	193	O	GOD1
2	I	RIN6	50	O	DRAMADR3	98	I/O	GDRAMD2	146	O	PGD0	194	O	GOD2
3	I	RIN7	51	O	DRAMADR4	99	I/O	GDRAMD3	147	O	PGD1	195	—	VDD5
4	—	GND	52	O	DRAMADR5	100	I/O	GDRAMD4	148	O	PGD2	196	O	GOD3
5	I	RES	53	O	DRAMADR6	101	I/O	GDRAMD5	149	O	PGD3	197	O	GOD4
6	I	TEST	54	O	DRAMADR7	102	I/O	GDRAMD6	150	O	PGD4	198	—	GND
7	I	VD	55	O	DRAMADR8	103	—	VDD3	151	O	PGD5	199	O	GOD5
8	I	HD	56	O	DRAMADR9	104	I/O	GDRAMD7	152	O	PGD6	200	O	GOD6
9	I	VBLNKV	57	—	VDD3	105	I/O	GDRAMD8	153	O	PGD7	201	O	GOD7
10	I	VBLNKR	58	—	VDD3	106	—	GND	154	—	GND	202	—	VDD5
11	—	VDD5	59	O	DRAMCAS	107	I/O	GDRAMD9	155	O	PBD0	203	O	ROD0
12	I	CLK	60	—	GND	108	I/O	GDRAMD10	156	O	PBD1	204	O	ROD1
13	—	GND	61	—	VDD3	109	I/O	GDRAMD11	157	O	PBD2	205	O	ROD2
14	I	HCLK	62	O	DRAMRAS01	110	I/O	GDRAMD12	158	O	PBD3	206	O	ROD3
15	—	GND	63	O	DRAMRAS23	111	I/O	GDRAMD13	159	O	PBD4	207	O	ROD4
16	I	RDn	64	—	GND	112	I/O	GDRAMD14	160	O	PBD5	208	O	ROD5
17	I	WRn	65	O	DRAMRAS45	113	I/O	GDRAMD15	161	O	PBD6	209	—	VDD5
18	—	VDD5	66	O	DRAMRAS67	114	—	GND	162	O	PBD7	210	O	ROD6
19	I	CS0n	67	O	DRAMRAS0	115	I/O	BDRAMD0	163	—	VDD5	211	O	ROD7
20	I	CS1n	68	O	DRAMRAS1	116	I/O	BDRAMD1	164	O	PDCLK1	212	—	GND
21	I	CS2	69	O	DRAMRAS2	117	—	VDD3	165	O	PDCLK2	213	I	BIN0
22	I	CS3	70	O	DRAMRAS3	118	I/O	BDRAMD2	166	—	GND	214	I	BIN1
23	I	ADR0	71	O	DRAMRAS4	119	I/O	BDRAMD3	167	O	PDCLK3	215	I	BIN2
24	I	ADR1	72	O	DRAMRAS5	120	—	GND	168	O	PDCLK4	216	I	BIN3
25	I	ADR2	73	O	DRAMRAS6	121	—	VDD3	169	O	PRTACT	217	I	BIN4
26	I	ADR3	74	O	DRAMRAS7	122	I/O	BDRAMD4	170	O	PRTBUSY	218	I	BIN5
27	I	ADR4	75	—	VDD3	123	I/O	BDRAMD5	171	O	LFTCHn_MON	219	I	BIN6
28	I	ADR5	76	I/O	RDRAMD0	124	—	GND	172	O	RABUSY	220	I	BIN7
29	—	GND	77	I/O	RDRAMD1	125	I/O	BDRAMD6	173	O	REFRESH	221	—	VDD5
30	I/O	D0	78	—	GND	126	I/O	BDRAMD7	174	O	HREFERENCE	222	I	GIN0
31	I/O	D1	79	I/O	RDRAMD2	127	I/O	BDRAMD8	175	O	MONITMG	223	—	GND
32	I/O	D2	80	I/O	RDRAMD3	128	I/O	BDRAMD9	176	O	PRTTMG	224	I	GIN1
33	I/O	D3	81	I/O	RDRAMD4	129	I/O	BDRAMD10	177	—	VDD5	225	I	GIN2
34	I/O	D4	82	I/O	RDRAMD5	130	I/O	BDRAMD11	178	O	VBLNK	226	—	VDD5
35	I/O	D5	83	I/O	RDRAMD6	131	I/O	BDRAMD12	179	O	BLNK	227	I	GIN3
36	I/O	D6	84	I/O	RDRAMD7	132	I/O	BDRAMD13	180	—	GND	228	I	GIN4
37	I/O	D7	85	I/O	RDRAMD8	133	I/O	BDRAMD14	181	—	VDD5	229	I	GIN5
38	I	SRC_MEMOn	86	I/O	RDRAMD9	134	I/O	BDRAMD15	182	O	BOD0	230	I	GIN6
39	I	FTCHn_MONI	87	I/O	RDRAMD10	135	—	VDD5	183	O	BOD1	231	I	GIN7
40	I	RATRG	88	I/O	RDRAMD11	136	O	PRD0	184	—	GND	232	—	GND
41	I	PDREQ	89	—	VDD3	137	O	PRD1	185	O	BOD2	233	I	RIN0
42	I	TRG4IN1	90	I/O	RDRAMD12	138	—	GND	186	O	BOD3	234	I	RIN1
43	—	VDD5	91	I/O	RDRAMD13	139	O	PRD2	187	O	BOD4	235	I	RIN2
44	O	DRAMOEn	92	—	GND	140	O	PRD3	188	O	BOD5	236	I	RIN3
45	O	DRAMWEn	93	I/O	RDRAMD14	141	O	PRD4	189	O	BOD6	237	—	VDD5
46	—	GND	94	I/O	RDRAMD15	142	O	PRD5	190	O	BOD7	238	I	RIN4
47	O	DRAMADR0	95	—	VDD3	143	O	PRD6	191	—	GND	239	I	RIN5
48	O	DRAMADR1	96	I/O	GDRAMD0	144	O	PRD7	192	O	GOD0	240	—	GND

CXD8865R (SONY)

C-MOS GATE ARRAY
—TOP VIEW—

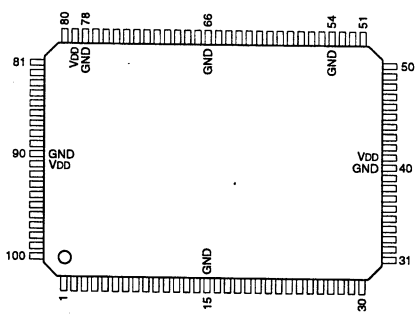


(VDD = +5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	D46	21	I	D24	41	—	GND	61	I	A7	81	O	XTALH
2	I	D45	22	I	D23	42	O	CLK2	62	—	GND	82	I	P
3	I	D44	23	I	D22	43	—	VDD	63	I	A6	83	O	TEST0
4	I	D43	24	I	D21	44	O	CLK4	64	I	A5	84	O	TEST1
5	I	D42	25	I	D20	45	I	LINN	65	I	A4	85	I	OSC0
6	I	D41	26	I	HEADACTN	46	I	ONNOFF	66	I	A3	86	I	OSC1
7	I	D40	27	I	PRINTPLS	47	I	S2	67	I	A2	87	I	XCLOCK
8	I	D36	28	I	D16	48	I	S1	68	I	A1	88	—	VDD
9	I	D35	29	I	D15	49	I	S0	69	I	A0	89	O	XOUTM
10	I	D34	30	I	D14	50	I	REN	70	I	RESETN	90	I	XINM
11	I	D33	31	I	D13	51	I	WEN	71	O	OUT7	91	I	RCLKSEL
12	—	GND	32	I	D12	52	I/O	D7	72	O	OUT6	92	O	XOUTH
13	I	D32	33	I	D11	53	I/O	D6	73	O	OUT5	93	I	XINH
14	I	D31	34	I	D10	54	I/O	D5	74	O	OUT4	94	—	GND
15	I	D30	35	I	LATCHN	55	I/O	D4	75	O	OUT3	95	O	TEST2
16	—	VDD	36	O	TEST7	56	I/O	D3	76	O	OUT2	96	O	TEST3
17	O	STBN	37	O	TEST8	57	I/O	D2	77	O	OUT1	97	O	TEST4
18	—	GND	38	—	VDD	58	I/O	D1	78	O	OUT0	98	O	TEST5
19	I	D26	39	O	TEST9	59	I/O	D0	79	O	XTALM	99	O	TEST6
20	I	D25	40	O	CLK	60	I	A8	80	—	VDD	100	O	RSTNOUT

CXD8868Q (SONY)

SEMI CUSTOM LSI
—TOP VIEW—

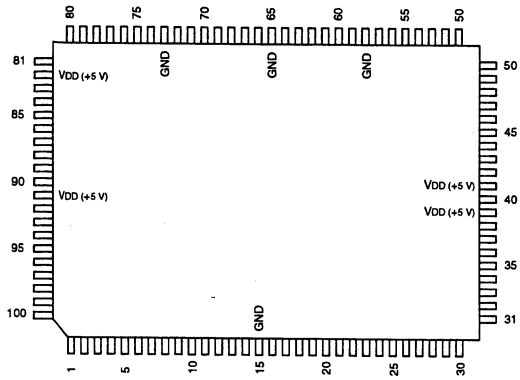


(VDD = +5 V)

PIN No.	SIGNAL	PIN No.	SIGNAL	PIN No.	SIGNAL	PIN No.	SIGNAL	PIN No.	SIGNAL
1	CKPB	21	IOB5	41	VDD	61	IOA18	81	IOC11
2	CKPC	22	IOB6	42	IOA0	62	IOA19	82	IOC12
3	CKA	23	IOB7	43	IOA1	63	IOA20	83	IOC13
4	CKB	24	IOB8	44	IOA2	64	IOA21	84	IOC14
5	CKC	25	IOB9	45	IOA3	65	IOA22	85	IOC15
6	SEL0	26	IOB10	46	IOA4	66	GND	86	IOC16
7	SEL1	27	IOB11	47	IOA5	67	IOA23	87	IOC17
8	SEL2	28	IOB12	48	IOA6	68	IOC0	88	IOC18
9	DIR0	29	IOB13	49	IOA7	69	IOC1	89	IOC19
10	DIR1	30	IOB14	50	IOA8	70	IOC2	90	GND
11	ROT1	31	IOB15	51	IOA9	71	IOC3	91	VDD
12	ROT2	32	IOB16	52	IOA10	72	IOC4	92	IOC20
13	A0	33	IOB17	53	IOA11	73	IOC5	93	IOC21
14	A1	34	IOB18	54	GND	74	IOC6	94	IOC22
15	GND	35	IOB19	55	IOA12	75	IOC7	95	IOC23
16	IOB0	36	IOB20	56	IOA13	76	IOC8	96	INV
17	IOB1	37	IOB21	57	IOA14	77	IOC9	97	G
18	IOB2	38	IOB22	58	IOA15	78	GND	98	CS
19	IOB3	39	IOB23	59	IOA16	79	VDD	99	FIX
20	IOB4	40	GND	60	IOA17	80	IOC10	100	CKPA

CXD8869Q (SONY)

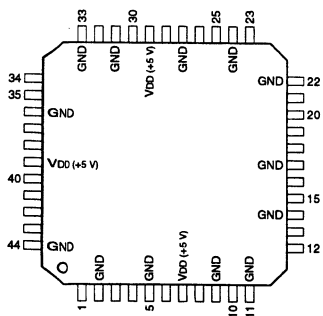
C-MOS CELL BACE IC
—TOP VIEW—

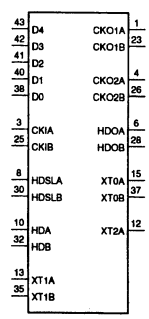


PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I/O	B7	21	I/O	R4	41	—	VDD	61	I/O	OUTR6	81	I	REV
2	I/O	B6	22	I/O	R3	42	I	A3	62	I/O	OUTR7	82	—	VDD
3	I/O	B5	23	I/O	R2	43	I	A4	63	I/O	OUTG0	83	O	OUTPS0
4	I/O	B4	24	I/O	R1	44	I	A5	64	I/O	OUTG1	84	O	OUTPS1
5	I/O	B3	25	I/O	R0	45	I	A6	65	—	GND	85	O	OUTPS2
6	I/O	B2	26	I	RDN	46	I	A7	66	I/O	OUTG2	86	O	OUTPS3
7	I/O	B1	27	I	WRN	47	I	A8	67	I/O	OUTG3	87	O	OUTPS4
8	I/O	B0	28	I/O	D7	48	I	A9	68	I/O	OUTG4	88	O	OUTPS5
9	I/O	G7	29	I/O	D6	49	I	A10	69	I/O	OUTG5	89	O	OUTPS6
10	I/O	G6	30	I/O	D5	50	I	CS1N	70	I/O	OUTG6	90	O	OUTPS7
11	I/O	G5	31	I/O	D4	51	I	CS2N	71	I/O	OUTG7	91	—	VDD
12	I/O	G4	32	I/O	D3	52	I	CS3	72	I/O	OUTB0	92	I	CLK2
13	I/O	G3	33	I/O	D2	53	I	CS4	73	—	GND	93	I	TEST
14	I/O	G2	34	I/O	D1	54	I/O	OUTR0	74	I/O	OUTB1	94	O	Y6N
15	—	GND	35	I/O	D0	55	I/O	OUTR1	75	I/O	OUTB2	95	O	Y7N
16	I/O	G1	36	I	A0	56	I/O	OUTR2	76	I/O	OUTB3	96	I	BE0
17	I/O	G0	37	I	A1	57	I/O	OUTR3	77	I/O	OUTB4	97	I	BE1
18	I/O	R7	38	I	A2	58	—	GND	78	I/O	OUTB5	98	I	BE2
19	I/O	R6	39	—	VDD	59	I/O	OUTR4	79	I/O	OUTB6	99	I	CLK1
20	I/O	R5	40	I	RESETN	60	I/O	OUTR5	80	I/O	OUTB7	100	I	OE1N

CXD8932Q (SONY)

C-MOS GATE ARRAY
—TOP VIEW—



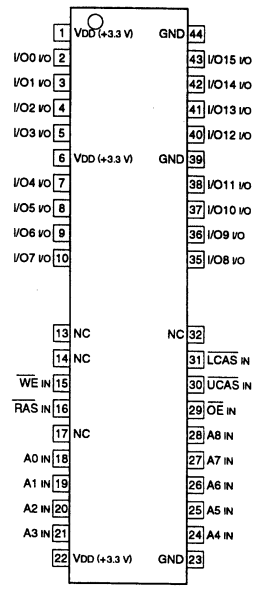


(VDD = +5 V)

PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	O	CKO1A	12	O	XT2A	23	O	CKO1B	34	—	NC
2	—	GND	13	I	XT1A	24	—	GND	35	I	XT1B
3	I	CKIA	14	—	GND	25	I	CKIB	36	—	GND
4	O	CKO2A	15	O	XT0A	26	O	CKO2B	37	O	XT0B
5	—	GND	16	—	NC	27	—	GND	38	I	D0
6	O	HDOA	17	—	GND	28	O	HDOB	39	—	VDD
7	—	VDD	18	—	NC	29	—	VDD	40	I	D1
8	I	HDSLA	19	—	NC	30	I	HDSLB	41	I	D2
9	—	GND	20	—	NC	31	—	GND	42	I	D3
10	I	HDA	21	—	NC	32	I	HDB	43	I	D4
11	—	GND	22	—	GND	33	—	GND	44	—	GND

HM51W4265CLTT-6 (HITACHI)

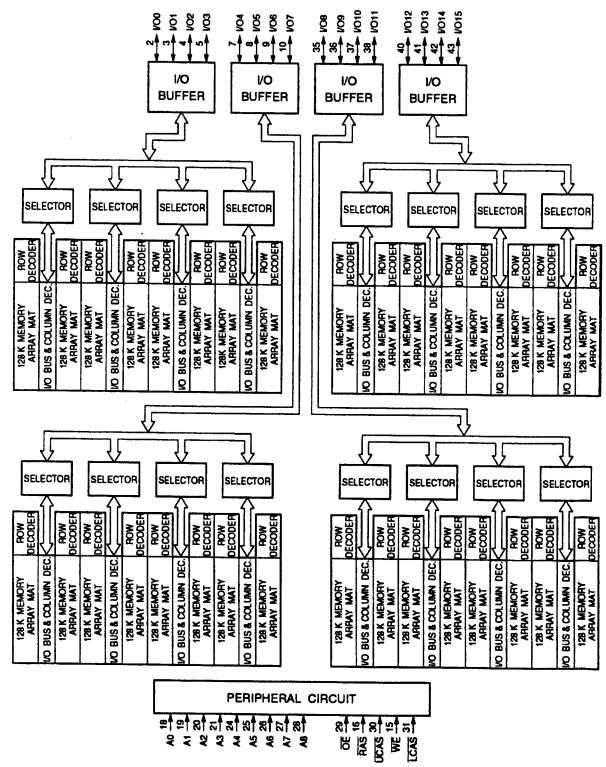
C-MOS 4 M (262,144 W × 16)-BIT DYNAMIC RAM
—TOP VIEW—



INPUT

A0–A8	; ADDRESS
$\overline{LCAS}$	; COLUMN ADDRESS STROBE
$\overline{OE}$	; OUTPUT ENABLE
$\overline{RAS}$	; ROW ADDRESS STROBE
$\overline{UCAS}$	; COLUMN ADDRESS STROBE
$\overline{WE}$	; READ/WRITE ENABLE

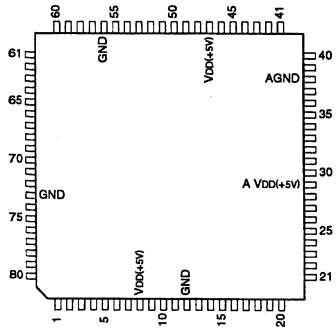
INPUT/OUTPUT
I/O0-I/O15 ; DATA



HD6413378F10 (HITACHI)

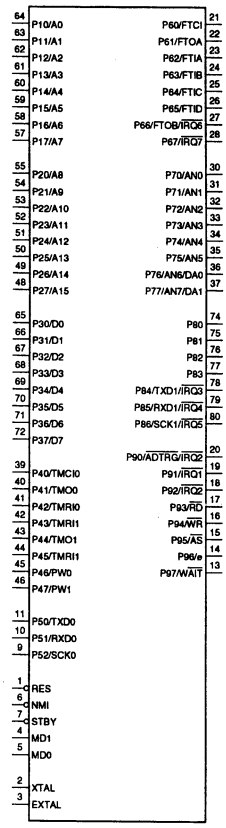
C-MOS 8-BIT SIGNAL CHIP MICRO COMPUTER

—TOP VIEW—



(VDD = +5V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	I	$\overline{RES}$	21	I/O	P60/FTCI	41	I/O	P42/TMRI0	61	I/O	P13/A3
2	I	XTAL	22	I/O	P61/FTOA	42	I/O	P43/TMCI1	62	I/O	P12/A2
3	I	EXTAL	23	I/O	P62/FTIA	43	I/O	P44/TMO1	63	I/O	P11/A1
4	I	MD1	24	I/O	P63/FTIB	44	I/O	P45/TMRI1	64	I/O	P10/A0
5	I	MD0	25	I/O	P64/FTIC	45	I/O	P46/PW0	65	I/O	P30/D0
6	I	$\overline{NMI}$	26	I/O	P65/FTID	46	I/O	P47/PW1	66	I/O	P31/D1
7	I	$\overline{STBY}$	27	I/O	P66/FTOB/$\overline{IRQ6}$	47	—	VDD	67	I/O	P32/D2
8	—	VDD	28	I/O	P67/$\overline{IRQ7}$	48	I/O	P27/A15	68	I/O	P33/D3
9	I/O	P52/SCK0	29	—	AVDD	49	I/O	P26/A14	69	I/O	P34/D4
10	I/O	P51/RXD0	30	I/O	P70/AN0	50	I/O	P25/A13	70	I/O	P35/D5
11	I/O	P50/TXD0	31	I/O	P71/AN1	51	I/O	P24/A12	71	I/O	P36/D6
12	—	GND	32	I	P72/AN2	52	I/O	P23/A11	72	I/O	P37/D7
13	I/O	P97/$\overline{WAIT}$	33	I	P73/AN3	53	I/O	P22/A10	73	—	GND
14	I/O	P96/ø	34	I	P74/AN4	54	I/O	P21/A9	74	I/O	P80
15	I/O	P95/$\overline{AS}$	35	I	P75/AN5	55	I/O	P20/A8	75	I/O	P81
16	I/O	P94/$\overline{WR}$	36	I	P76/AN6/DA0	56	—	GND	76	I/O	P82
17	I/O	P93/$\overline{RD}$	37	I	P77/AN7/DA1	57	I/O	P17/A7	77	I/O	P83
18	I/O	P92/$\overline{IRQ2}$	38	—	AGND	58	I/O	P16/A6	78	I/O	P84/TXD1/$\overline{IRQ3}$
19	I/O	P91/$\overline{IRQ1}$	39	I/O	P40/TMCI0	59	I/O	P15/A5	79	I/O	P85/RXD1/$\overline{IRQ4}$
20	I/O	P90/$\overline{ADTRG}$/$\overline{IRQ2}$	40	I/O	P41/TMO0	60	I/O	P14/A4	80	I/O	P86/SCK1/$\overline{IRQ5}$



INPUT

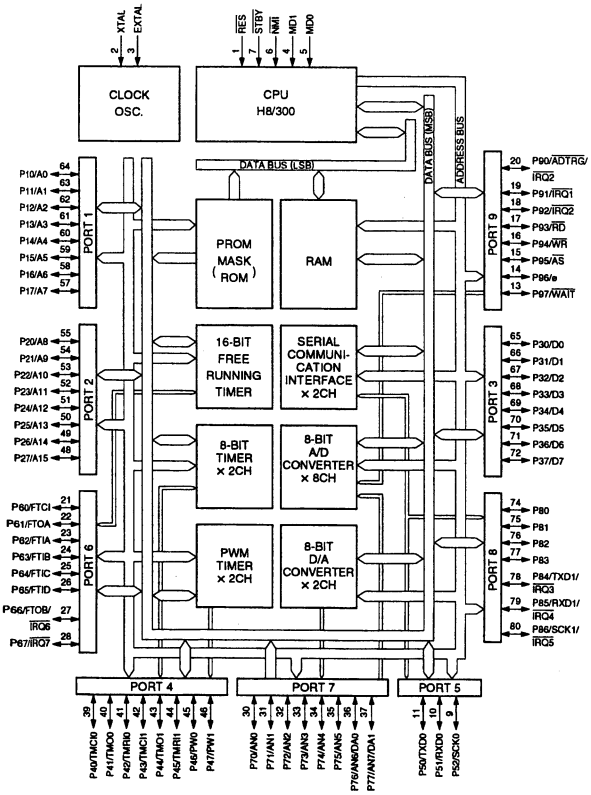
$\overline{ADTRG}$	;	A/D CONVERTER EXTERNAL TRIGGER
AN0 - AN7	;	ANALOG
EXTAL	;	CRYSTAL OSCILLATOR
FTCI	;	FRT COUNTER CLOCK
FTIA-FTID	;	FRT INPUT CAPTURE
$\overline{IRQ0}$ - $\overline{IRQ7}$	;	INTERRUPT REQUEST
MD0, MD1	;	MODE
$\overline{NMI}$	;	NON-MASKABLE INTERRUPT
P70 - P77	;	PORT 7
$\overline{RES}$	;	RESET
RXD0, RXD1	;	RECEIVE DATA
$\overline{STBY}$	;	STANDBY
TMCI0, TMCI1	;	8-BIT TIMER CLOCK
TMRI0, TMRI1	;	8-BIT TIMER COUNTER RESET
$\overline{WAIT}$	;	WAIT
XTAL	;	CRYSTAL OSCILLATOR
ø	;	SYSTEM CLOCK

OUTPUT

A0 - A15	;	ADDRESS BUS
$\overline{AS}$	;	ADDRESS STROBE
DA0, DA1	;	ANALOG
FTOA, FTOB	;	FRT OUTPUT COMPERE
PW0, PW1	;	PWM TIMER
$\overline{RD}$	;	READ
TMO0,TMO1	;	8-BIT TIMER
TXD0,TXD1	;	TRANSCEIVER DATA
$\overline{WR}$	;	WRITE

INPUT/OUTPUT

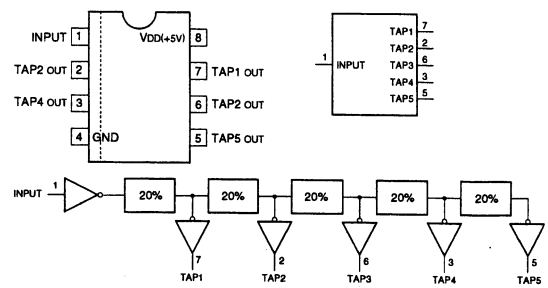
D0 - D7	;	DATA BUS
P10 - P17	;	PORT 1
P20VP27	;	PORT 2
P30 - P37	;	PORT 3
P40 - P47	;	PORT 4
P50 - P52	;	PORT 5
P60 - P67	;	PORT 6
P80 - P86	;	PORT 8
P90 - P97	;	PORT 9
SCK0,SCK1	;	SERIAL CLOCK



DS1000Z-50 (DALLAS SEMICONDUCTOR)
DS1000Z-50(TE2)
DS1000Z-75
DS1000Z-75(TE2) (DALLAS SEMICONDUCTOR)

C-MOS DELAY LINE

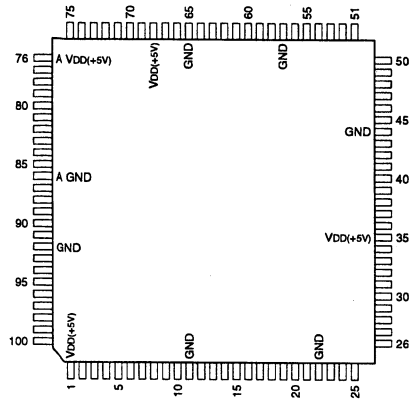
—TOP VIEW—

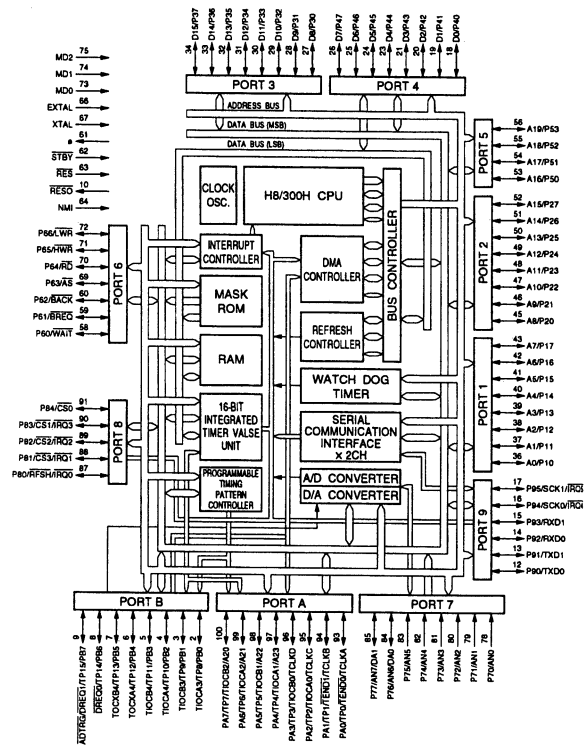


TYPE. NO.	DELAY TIME (ns)				
	TAP1	TAP2	TAP3	TAP4	TAP5
DS1000M-50	10	20	30	40	50
DS1000M-60	12	24	36	48	60
DS1000M-75	15	30	45	60	75
DS1000M-100	20	40	60	80	100
DS1000M-125	25	50	75	100	125
DS1000M-150	30	60	90	120	150
DS1000M-175	35	70	105	140	175
DS1000M-200	40	80	120	160	200
DS1000M-250	50	100	150	200	250
DS1000M-500	100	200	300	400	500
DS1000Z-25	5	10	15	20	25
DS1000Z-100	20	40	60	80	100

HD6433040S-A00F (HITACHI)

C-MOS 16-BIT MICRO PROCESSOR
—TOP VIEW—



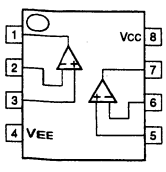


(VDD = +5V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	—	VDD	26	I/O	P47/D7	51	I/O	P26/A14	76	—	A VDD
2	I/O	PB0/TIOCA3/TP8	27	I/O	P30/D8	52	I/O	P27/A15	77	I	VREF
3	I/O	PB1/TIOCB3/TP9	28	I/O	P31/D9	56	I/O	P50/A16	78	I	P70/AN0
4	I/O	PB2/TIOCA4/TP10	29	I/O	P32/D10	54	I/O	P51/A17	79	I	P71/AN1
5	I/O	PB3/TIOCB4/TP11	30	I/O	P33/D11	55	I/O	P52/A18	80	I	P72/AN2
6	I/O	PB4/TOCXA4/TP12	31	I/O	P34/D12	56	I/O	P53/A19	81	I	P73/AN3
7	I/O	PB5/TOCXB4/TP13	32	I/O	P35/D13	57	—	GND	82	I	P74/AN4
8	I/O	PB6/$\overline{DREQ0}$/TP14	33	I/O	P36/D14	58	I/O	P60/$\overline{WAIT}$	83	I	P75/AN5
9	I/O	PB7/ADTRG/$\overline{DREQ1}$/TP15	34	I/O	P37/D15	59	I/O	P61/$\overline{BREQ}$	84	I/O	P76/AN6/DA0
10	O	$\overline{RESO}$	35	—	VDD	60	I/O	P62/$\overline{BACK}$	85	I/O	P77/AN7/DA1
11	—	GND	36	I/O	P10/A0	61	O	ø	86	—	A GND
12	I/O	P90/TXD0	37	I/O	P11/A1	62	I	$\overline{STBY}$	87	I/O	PB0/$\overline{RFSH}$/IRQ0
13	I/O	P91/TXD1	38	I/O	P12/A2	63	I	$\overline{RES}$	88	I/O	PB1/$\overline{CS3}$/RAS/IRQ1
14	I/O	P92/RXD0	39	I/O	P13/A3	64	I	NMI	89	I/O	PB2/$\overline{CS2}$/IRQ2
15	I/O	P93RXD1	40	I/O	P14/A4	65	—	GND	90	I/O	PB3/$\overline{CS1}$/IRQ3
16	I/O	P94/IRQ4/SCK0	41	I/O	P15/A5	66	I	EXTAL	91	I/O	PB4/$\overline{CS0}$
17	I/O	P95/IRQ5/SCK1	42	I/O	P16/A6	67	I	XTAL	92	—	GND
18	I/O	P40/D0	43	I/O	P17/A7	68	—	VDD	93	I/O	PA0/TP0/$\overline{TEND0}$/TCLKA
19	I/O	P41/D1	44	—	GND	69	I/O	P63/$\overline{AS}$	94	I/O	PA1/TP1/$\overline{TEND1}$/TCLKB
20	I/O	P42/D2	45	I/O	P20/A8	70	I/O	P64/$\overline{RD}$	95	I/O	PA2/TP2/TIOCA0/TCLKC
21	I/O	P43/D3	46	I/O	P21/A9	71	I/O	P65/$\overline{HWR}$	96	I/O	PA3/TP3/TIOCB0/TCLKD
22	—	GND	47	I/O	P22/A10	72	I/O	P66/$\overline{LWR}$	97	I/O	PA4/TP4/TIOCA1/A23
23	I/O	P44/D4	48	I/O	P23/A11	73	I	MD0	98	I/O	PA5/TP5/TIOCB1/A22
24	I/O	P45/D5	49	I/O	P24/A12	74	I	MD1	99	I/O	PA6/TP6/TIOCA2/A21
25	I/O	P46/D6	50	I/O	P25/A13	75	I	MD2	100	I/O	PA7/TP7/TIOCB2/A20

LM358PS (TI)FLAT PACKAGE
LM358PS-E05

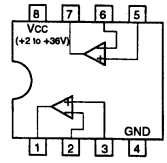
DUAL OPERATIONAL AMPLIFIERS
(SINGLE-SUPPLY TYPE)
—TOP VIEW—



TYPE	VCC - VEE
828 TYPE	+5 to +36V
2244 TYPE	+2.5 to +36V
2904 TYPE	+3 to +24V
3404 TYPE	+4 to +32V
3414 TYPE	+3 to +10V
4572 TYPE	+4 to +14V
5216 TYPE	+4 to +32V
7022 TYPE	+3 to +16V
75W01 TYPE	+3 to +10V
33172 TYPE	+3 to +44V
OTHERS	+3 to +36V

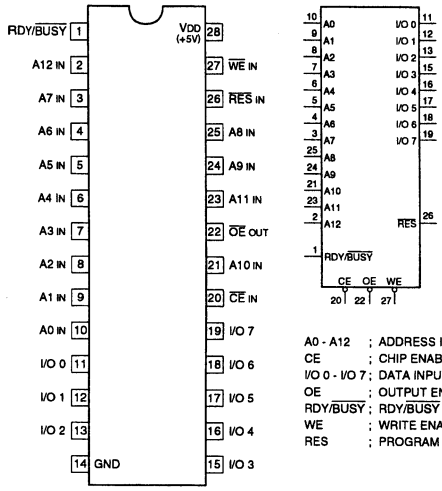
LM393PS (TI)FLAT PACKAGE
LM393PS-E05

DUAL VOLTAGE COMPARATORS
—TOP VIEW—



HN58C66FP-25 (HITACHI)
HN58C66SFP25TZ

C-MOS 64K (8192 × 8)-BIT EEPROM
—TOP VIEW—



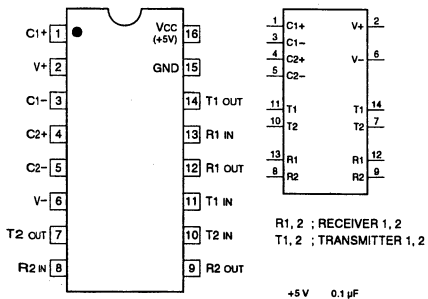
A0 - A12 ; ADDRESS INPUTS
CE ; CHIP ENABLE INPUT
I/O 0 - I/O 7 ; DATA INPUTS/OUTPUTS
OE ; OUTPUT ENABLE
RDY/BUSY ; RDY/BUSY OUTPUT
WE ; WRITE ENABLE INPUT
RES ; PROGRAM RESET INPUT

CE	OE	WE	RDY/BUSY	RES	I/O TERMINAL	FUNCTION
0	0	1	HI-Z	1	DOUT	READ
1	X	X	HI-Z	X	HI-Z	STANDBY
0	1	0	HI-Z→LOW	1	DIN	WRITE
0	1	1	HI-Z	1	HI-ZL	DESELECT
X	X	1	HI-Z	X	—	WRITE INH
X	0	X	HI-Z	X	—	WRITE INH
0	0	1	LOW	1	DATA OUT (1/07)	DATA POLLING
X	X	X	HI-Z	0	HI-Z	PROGRAM RESET

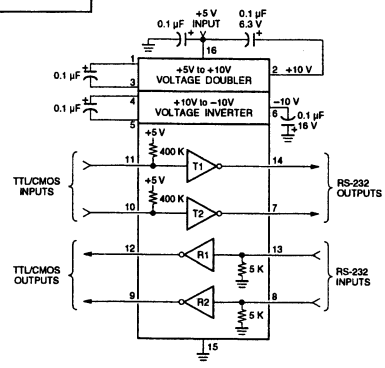
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

MAX202CSE (MAXIM)
MAX202CSE-TE2

RS-232 TRANSMITTER/RECEIVER
—TOP VIEW—

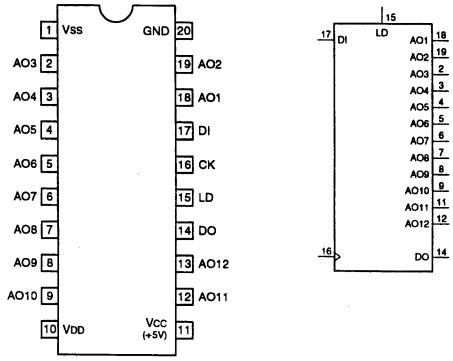


R1, 2 ; RECEIVER 1, 2
T1, 2 ; TRANSMITTER 1, 2



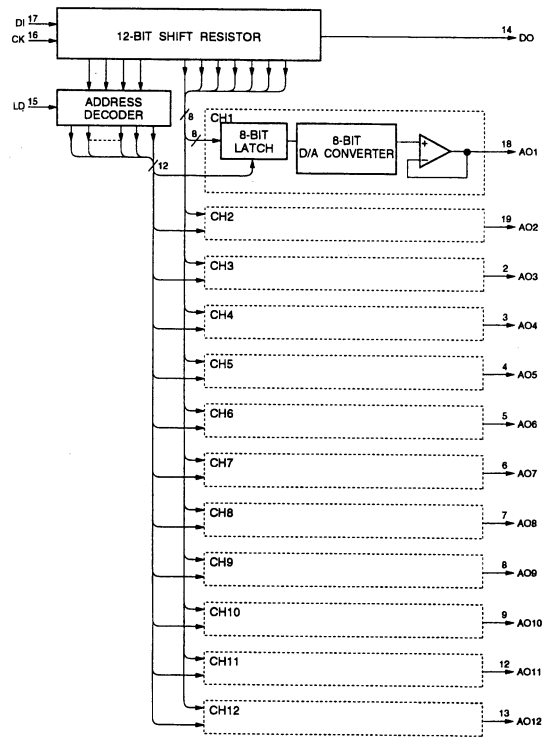
M62352GP (MITSUBISHI)FLAT PACKAGE
M62352GP-75EC

C-MOS 8-BIT × 12 CHANNEL D/A CONVERTER
(WITH BUFFER OPERATIONAL AMPLIFIER)
—TOP VIEW—



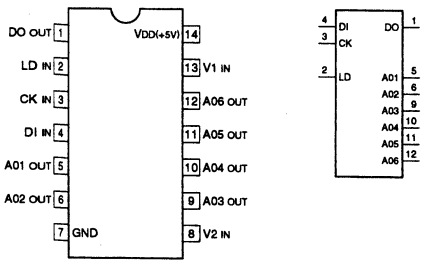
AO1 - AO12 ; 8-BIT D/A OUTPUTS
CK ; CLOCK INPUT
DI ; SERIAL DATA INPUT
DO ; DATA OUTPUT

NOTE:
3.5 V < VDD < VCC
−3.5 V < VSS < VCC

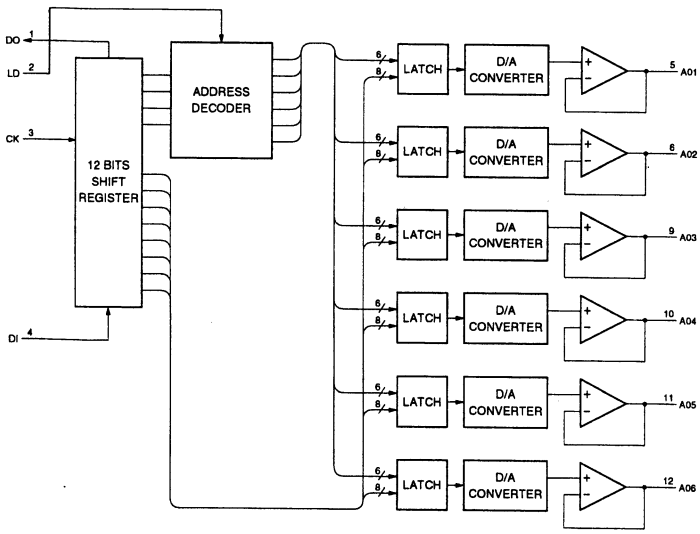


M62354FP-T1 (MITSUBISHI)

C-MOS 8 BITS 6 CHANNEL D/A CONVERTER
—TOP VIEW—



A01 - A06 ; 8 BITS D/A OUTPUTS
CK ; CLOCK INPUT
DI ; 12 BITS SERIAL DATA INPUT
DO ; BIT DATA OF MSB OF 12 BITS SHIFT REGISTER OUTPUT
LD ; LOAD INPUT
V1 ; REFERENCE VOLTAGE (UPPER) +3.5 to +5 (VDD) V
V2 ; REFERENCE VOLTAGE (LOWER) 0 to +1.5 (VDD–3.5) V



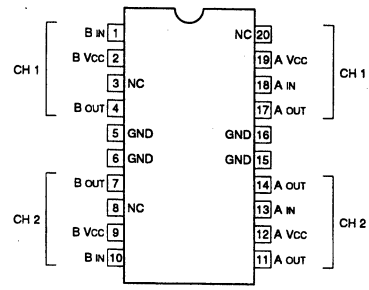
D0	D1	D2	D3	D4	D5	D6	D7	D/A OUTPUT
0	0	0	0	0	0	0	0	(V1–V2) / 256 × 1 + V2
1	0	0	0	0	0	0	0	(V1–V2) / 256 × 2 + V2
0	1	0	0	0	0	0	0	(V1–V2) / 256 × 3 + V2
1	1	0	0	0	0	0	0	(V1–V2) / 256 × 4 + V2
:	:	:	:	:	:	:	:	:
0	1	1	1	1	1	1	1	(V1–V2) / 256 × 255 + V2
1	1	1	1	1	1	1	1	V1

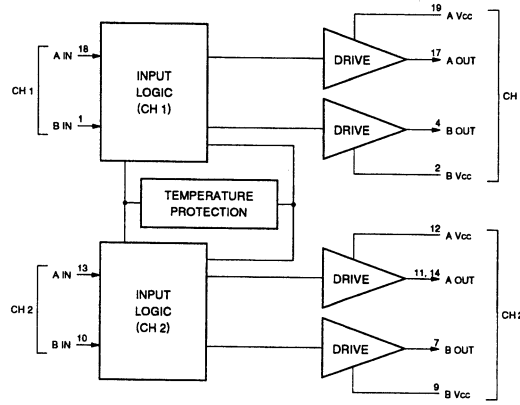
D8	D9	D10	D11	ADDRESS SELECT
0	0	0	0	×
0	0	0	1	A01
0	0	1	0	A02
0	0	1	1	A03
0	1	0	0	A04
0	1	0	1	A05
0	1	1	0	A06
0	1	1	1	×
1	×	×	×	×

0 ; LOW LEVEL
1 ; HIGH LEVEL
× ; DON'T CARE

MB3863PF-G-BND (FUJITSU)
MB3863PF-G-BND-ER

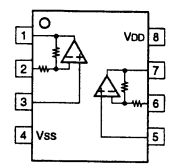
DUAL MODE MOTOR DRIVER
—TOP VIEW—





MC14576CFEL (MOTOROLA)FLAT PACKAGE

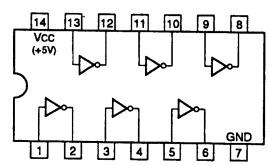
C-MOS DUAL VIDEO AMPLIFIERS
—TOP VIEW—

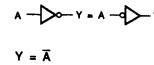


*VDD + I VSS I = +5 to +12V

MC74F04MEL (MOTOROLA)FLAT PACKAGE

TTL INVERTER
—TOP VIEW—





$Y = \overline{A}$

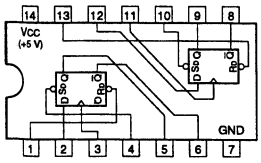
A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

MC74F74M-EL (MOTOROLA)FLAT PACKAGE

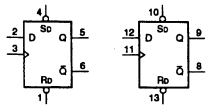
TTL D-TYPE FLIP FLOP WITH DIRECT SET/RESET

—TOP VIEW—



INPUTS				OUTPUTS	
SD	RD	CK	D	Qn+1	Qn+1
0	1	X	X	1	0
1	0	X	X	0	1
0	0	X	X	1*	1*
1	1	↑	1	1	0
1	1	↑	0	0	1
1	1	0	X	Qn	Qn

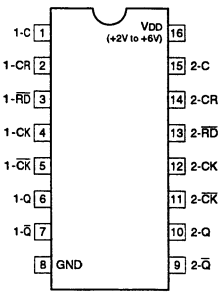
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
1* ; NONSTABLE

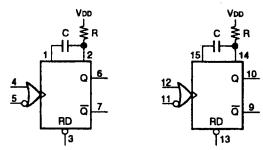


MC74HC4538AF (MOTOROLA)FLAT PACKAGE
MC74HC4538AFEL

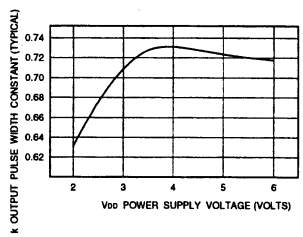
C-MOS DUAL RETRIGGERABLE / NON-RETRIGGERABLE MONOSTABLE MULTIVIBRATOR

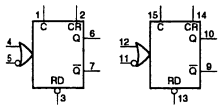
—TOP VIEW—



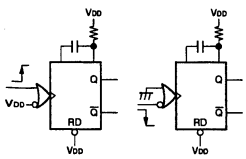


OUTPUT PULSE WIDTH = k · C · R

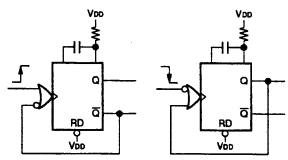




RETRIGGERABLE M. M. V



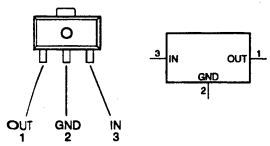
NON-RETRIGGERABLE M. M. V



NJM78L09UA(TE1) (JRC)+12 V(100 mA)

POSITIVE VOLTAGE REGULATOR

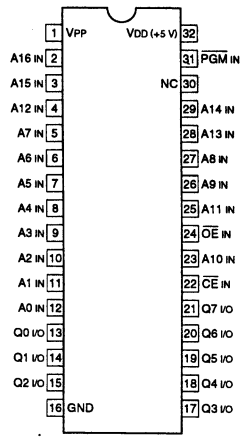
—SIDE VIEW—



MX27C1000DC-12 (MACRONIX)

C-MOS 1 M (128 K × 8)-BIT ERASABLE PROM

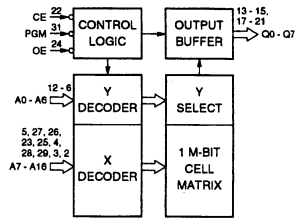
—TOP VIEW—



INPUT
A0 - A16 ; ADDRESS
$\overline{CE}$; CHIP ENABLE
$\overline{OE}$; OUTPUT ENABLE
$\overline{PGM}$; PROGRAM ENABLE

OUTPUT
Q0 - Q7 ; DATA

OTHER
Vpp ; PROGRAM POWER SUPPLY



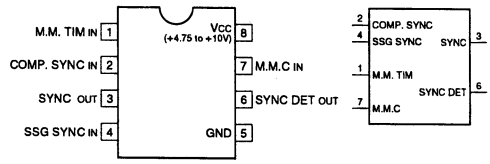
MODE \ TERMINAL	$\overline{CE}$	$\overline{OE}$	$\overline{PGM}$	A0	A9	Vpp	OUTPUT
READ	0	0	×	×	×	+5 V	D OUT
OUTPUT DISABLE	0	1	×	×	×	+5 V	HI-Z
STANDBY (TTL)	1	×	×	×	×	+5 V	HI-Z
STANDBY (CMOS)	VDD±0.3 V	×	×	×	×	+5 V	HI-Z
PROGRAM	0	1	0	×	×	+12.5 V	D IN
PROGRAM VERIFY	0	0	1	×	×	+12.5 V	D OUT
PROGRAM INHIBIT	1	×	×	×	×	+12.5 V	HI-Z

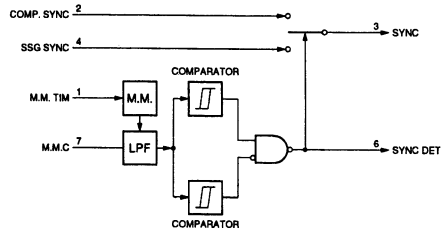
0 ; LOW LEVEL
1 ; HIGH LEVEL
× ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

NJM2230M (JRC)FLAT PACKAGE
NJM2230M(TE2)

VIDEO SIGNAL DETECTOR

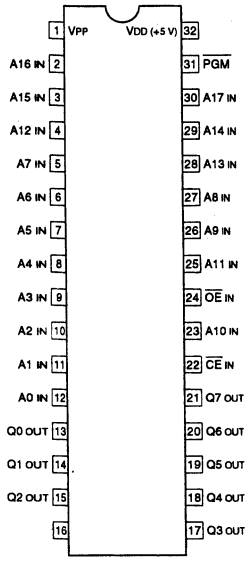
—TOP VIEW—





MX27C2000DC-12 (MACRONIX)

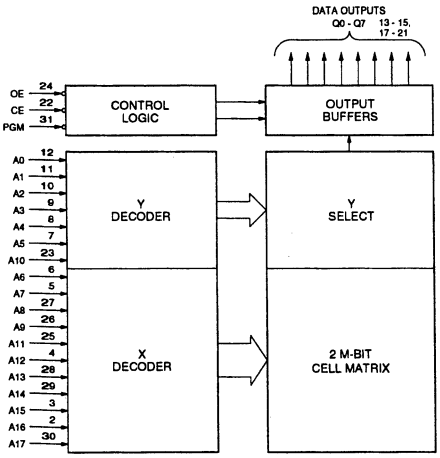
C-MOS 2 M (256 K × 8)-BIT ERASABLE PROM
—TOP VIEW—



INPUT
A0 - A17 ; ADDRESS
$\overline{CE}$; CHIP ENABLE
$\overline{OE}$; OUTPUT ENABLE
$\overline{PGM}$; PROGRAM ENABLE

OUTPUT
Q0 - Q7 ; DATA

OTHER
VPP ; PROGRAM POWER SUPPLY

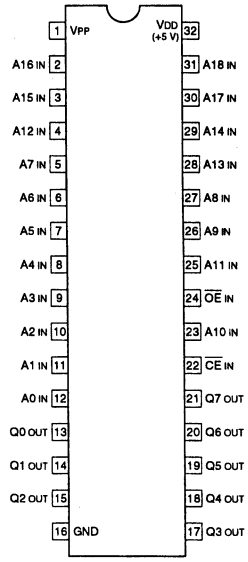


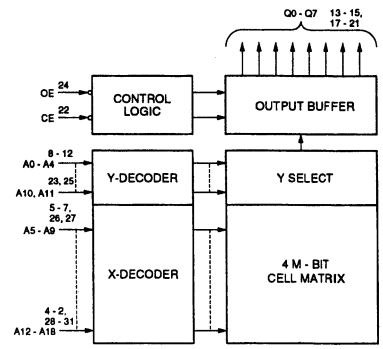
MODE \ TERMINAL	$\overline{CE}$	$\overline{OE}$	$\overline{PGM}$	A0	A9	VPP	OUTPUT
READ	0	0	×	×	×	+5 V	D OUT
OUTPUT DISABLE	0	1	×	×	×	+5 V	HI-Z
STANDBY (TTL)	1	×	×	×	×	+5 V	HI-Z
STANDBY (CMOS)	VDD±0.3 V	×	×	×	×	+5 V	HI-Z
PROGRAM	0	1	0	×	×	+12.5 V	D IN
PROGRAM VERIFY	0	0	1	×	×	+12.5 V	D OUT
PROGRAM INHIBIT	1	×	×	×	×	+12.5 V	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
× ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

MX27C4000MC-12-TEL (MACRONIX)

C-MOS 4 M (512 K × 8)-BIT ERASABLE PROM
—TOP VIEW—





INPUT
A0 - A18 ; ADDRESS
$\overline{CE}$; CHIP ENABLE
$\overline{OE}$; OUTPUT ENABLE

OUTPUT
Q0-Q7 ; DATA

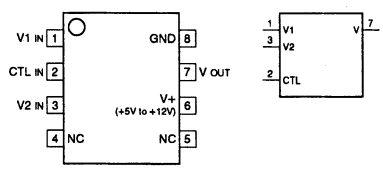
OTHER
VPP ; PROGRAM POWER SUPPLY

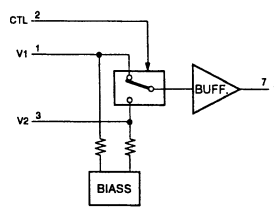
MODE \ TERMINAL	$\overline{CE}$	$\overline{OE}$	A0	A9	VPP	OUTPUT
READ	0	0	×	×	+5 V	D OUT
OUTPUT DISABLE	0	1	×	×	+5 V	HI-Z
STANDBY (TTL)	1	×	×	×	+5 V	HI-Z
STANDBY (CMOS)	VDD±0.3 V	×	×	×	+5 V	HI-Z
PROGRAM	0	1	×	×	+12.5 V	D IN
PROGRAM VERIFY	1	0	×	×	+12.5 V	D OUT
PROGRAM INHIBIT	1	×	×	×	+12.5 V	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
× ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

NJM2233BM (JRC)FLAT PACKAGE
NJM2233BM(TE2)

2-INPUT VIDEO SIGNAL SWITCH
—TOP VIEW—



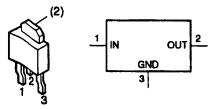


CTL	V
0	V1
1	V2

0 ; LOW LEVEL
1 ; HIGH LEVEL

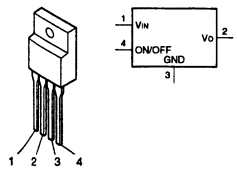
PQ05SZ1U (SHARP)+5 V 1 A

POSITIVE VOLTAGE REGULATOR
—TOP VIEW—

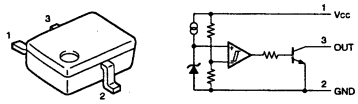


PQ3RF33 (SHARP)+3.5 V

POSITIVE VOLTAGE REGULATOR (1A)
—TOP VIEW—

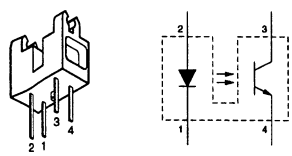


PST572CMT (MITSUMI)Vs=4.5 V
PST572CMT-T1



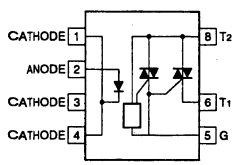
RPI-5100 (ROHM)

PHOTO INTERRUPTER



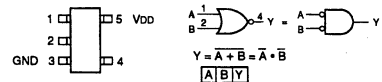
S16MD01 (SHARP)

SOLID STATE RELAY
—TOP VIEW—



SC7S02F (MOTOROLA)CHIP PACKAGE
TC7S02F(TE85R)

C-MOS 2-INPUT NOR GATE
—TOP VIEW—



$Y = \overline{A + B} = \overline{A} \cdot \overline{B}$

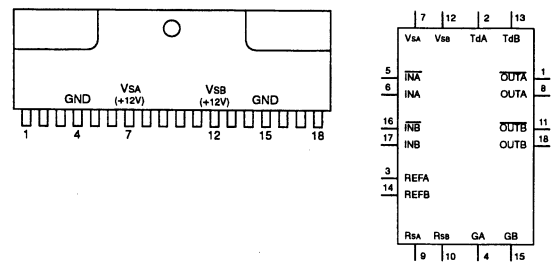
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TYPE	VDD
4S01F	+3 to +18V
7S02F	+2 to +6V
7S02FU	
7SH02FU	

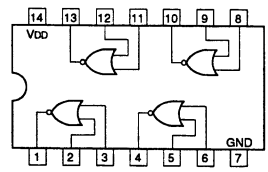
SLA7024M (SANKEN)

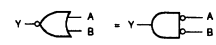
STEPPING MOTOR UNIPOLAR DRIVING
—SIDE VIEW—



SN74HC02ANS (TI)FLAT PACKAGE
SN74HC02ANS-E05

C-MOS QUAD 2-INPUT NOR GATES
—TOP VIEW—





$Y = \overline{A + B} = \overline{A} \cdot \overline{B}$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

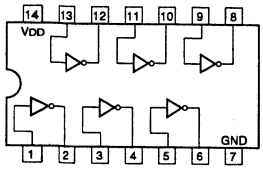
0 ; LOW LEVEL
1 ; HIGH LEVEL

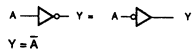
NOTE:

TYPE	VDD
74HC	+2 to +6V
74AC/74VHC	+2 to +5.5V
74HCT/74ACT	+4.5 to +5.5V
74LCX	+2 to +3.6V

SN74HC04ANS (TI)FLAT PACKAGE
SN74HCU04ANS-E05 (TI)FLAT PACKAGE
SN74HCU04ANS-E20 (TI)FLAT PACKAGE

C-MOS HEX INVERTERS
—TOP VIEW—





$Y = \overline{A}$

A	Y
0	1
1	0

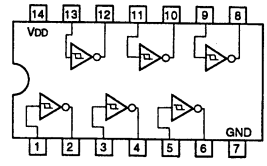
0 ; LOW LEVEL
1 ; HIGH LEVEL

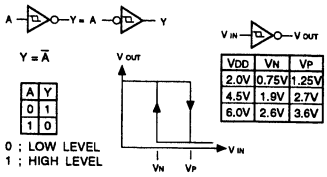
NOTE:

TYPE	VDD
74AC/74VHC/74VHCT	+2 to +5.5V
74ACT/74HCT	+4.5 to +5.5V
74LCX	+2 to +3.6V
OTHER TYPE	+2 to +6V

SN74HC14ANS (TI)FLAT PACKAGE
SN74HC14ANS-E05

C-MOS HEX SCHMITT TRIGGER INVERTERS
—TOP VIEW—





$Y = \overline{A}$

A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

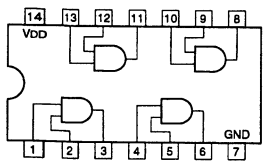
VDD	VN	VP
2.0V	0.75V	1.25V
4.5V	1.9V	2.7V
6.0V	2.6V	3.6V

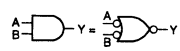
NOTE :

TYPE	VDD
74LCX	+2 to +3.6V
TC74AC/VHC	+2 to +5.5V
OTHER TYPES	+2 to +6V

SN74HC08ANS (TI)FLAT PACKAGE
SN74HC08ANS-E05

C-MOS QUAD 2-INPUT AND GATE
—TOP VIEW—





$Y = A \cdot B = \overline{\overline{A} + \overline{B}}$

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

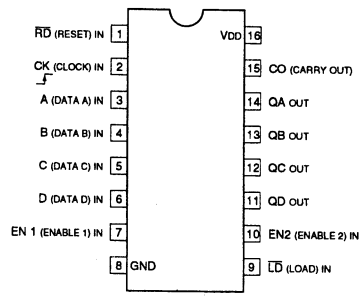
0 ; LOW LEVEL
1 ; HIGH LEVEL

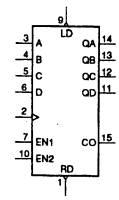
NOTE;

TYPE	VDD
74AC	+2 to +5.5V
40H	+2 to +8V
74ACT/74HCT/74VHCT	+4.5 to +5.5V
74LCX	+2 to +3.6V
OTHER TYPES	+2 to +6V

SN74HC161ANS (TI)FLAT PACKAGE
SN74HC161ANS-E05

C-MOS SYNCHRONOUS PRESETTABLE 4-BIT BINARY COUNTER
—TOP VIEW—





MODE SELECTION

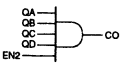
CONTROL INPUTS				MODE
RD	LD	EN1	EN2	
0	X	X	X	RESET (ASYNCHRONOUS)
1	0	X	X	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	X	0	NO COUNT
1	1	1	1	COUNT

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

COUNT SEQUENCE

COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

CARRY OUTPUT "CO"



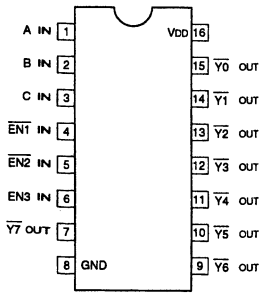
CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

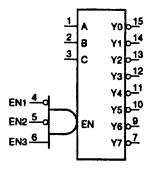
NOTE :

TYPE	VDD
74ACT	+5 V
TC40H	+2 to +8 V
OTHERS	+2 to +6 V

SN74HC138ANS (TI)FLAT PACKAGE
SN74HC138ANS-E05

C-MOS 3-TO-8 LINE DECODER / DEMULTIPLEXER
—TOP VIEW—





INPUTS				OUTPUTS							
EN	C	B	A	Y7	Y6	Y5	Y4	Y3	Y2	Y1	Y0
0	X	X	X	1	1	1	1	1	1	1	1
1	0	0	0	1	1	1	1	1	1	1	0
1	0	0	1	1	1	1	1	1	1	0	1
1	0	1	0	1	1	1	1	1	0	1	1
1	0	1	1	1	1	1	1	0	1	1	1
1	1	0	0	1	1	1	1	0	1	1	1
1	1	0	1	1	1	1	0	1	1	1	1
1	1	1	0	1	1	0	1	1	1	1	1
1	1	1	1	0	1	1	1	1	1	1	1

$EN = \overline{EN1} \cdot \overline{EN2} \cdot EN3$

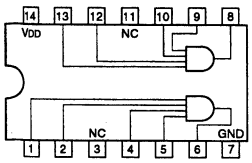
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

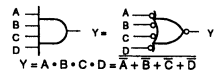
NOTE:

TYPE	VDD
74HCT138 TYPE	+5V
74ACT138 TYPE	+4.5 to+5.5V
TC74AC138 TYPE TC74VHC138	+2 to +5.5V
OTHER TYPES	+2 to +6V

SN74HC21ANS (TI)FLAT PACKAGE
SN74HC21ANS-E05

C-MOS DUAL 4-INPUT POSITIVE AND GATE
—TOP VIEW—





A	B	C	D	Y
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	1

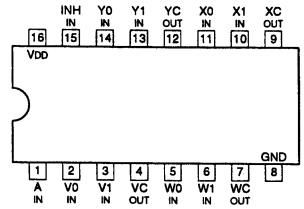
0 ; LOW LEVEL
1 ; HIGH LEVEL

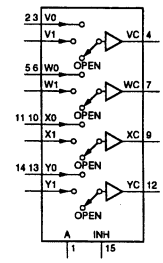
NOTE:

TYPE	VDD
HC	+2V to +6V
VHC	+2V to +5.5V

SN74HC257ANS-E05 (TI)FLAT PACKAGE

C-MOS 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
—TOP VIEW—





CONT. IN		ON
INH	A	CHANNEL
0	0	0
0	1	1
1	X	OPEN

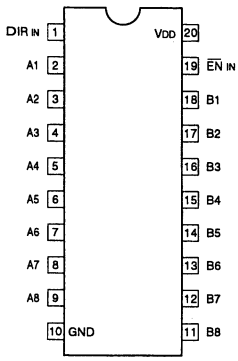
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

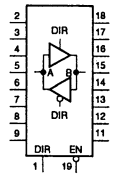
NOTE:

TYPE	VDD
74AC/74HC	+2 to +6V
74ACT	+5V
TC74AC257F	+2 to +5.5V

SN74HC245ANS (TI)FLAT PACKAGE
SN74HC245ANS-E05

C-MOS BILATERAL BUS TRANSCEIVERS WITH 3-STATE OUTPUTS
—TOP VIEW—



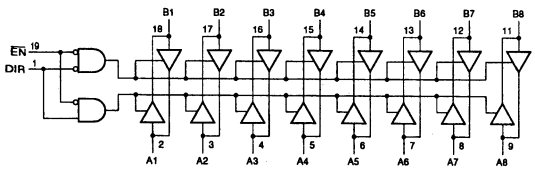


$\overline{EN}$	DIR	OPERATION
0	0	B to A
0	1	A to B
1	X	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

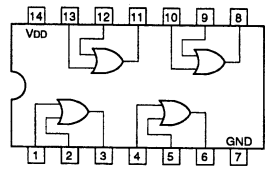
NOTE:

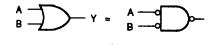
TYPE	VDD
74HC	+2 to +6V
74ABT 74ACT 74BCT 74HCT	+4.5 to +5.5V
74AC 74VHC	+2 to +5.5V
74LCX	+2 to +3.6V
74LVT	+2.7 to +3.6V



SN74HC32ANS (TI)FLAT PACKAGE
SN74HC32ANS-E05

C-MOS QUAD 2-INPUT OR GATES
—TOP VIEW—





A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

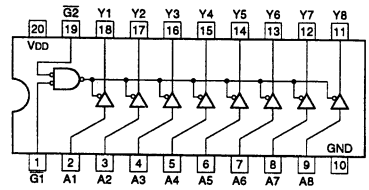
0 ; LOW LEVEL
1 ; HIGH LEVEL

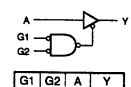
NOTE:

TYPE	VDD
74AC/74VHC	+2 to +5.5V
74HC	+2 to +6V
74HCT	+4.5 to +5.5V

SN74HC541ANS (TI)FLAT PACKAGE
SN74HC541ANS-E05

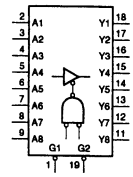
C-MOS BUFFERS AND LINE DRIVERS WITH 3-STATE OUTPUTS
—TOP VIEW—





G1	G2	A	Y
0	0	0	0
0	0	1	1
1	X	X	HI-Z
X	1	X	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

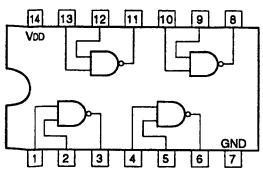


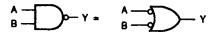
NOTE:

TYPE	VDD
TC74AC/TC74VHC	+2 to +5.5V
ABT/ACT/BCT/HCT/VHCT	+5V
LCX	+2 to +3.6V
OTHER TYPES	+2 to +6V

SN74HC00ANS (TI)
SN74HC00ANS-E05

C-MOS QUAD 2-INPUT NAND GATES
—TOP VIEW—





A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

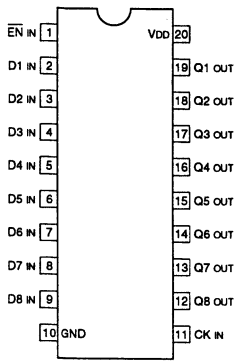
NOTE:

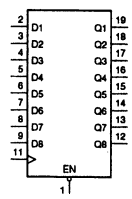
TYPE	VDD
74AC/74VHC	+2 to +5.5V
74ACT/74HCT/74VHCT	+4.5 to +5.5V
LCX	+2 to +3.6V
OTHER TYPES	+2 to +6V

UP-D2550(J)
UP-D2500(UC,CE)

SN74HC574ANS (TI)FLAT PACKAGE
SN74HC574ANS-E05

C-MOS 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP
—TOP VIEW—

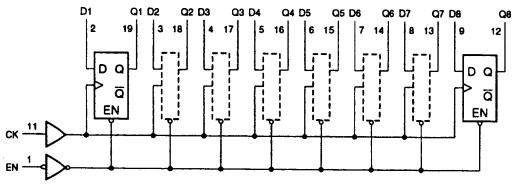




EACH FLIP-FLOP

INPUTS			OUT
EN	CK	D	Q
0	↑	1	1
0	↑	0	0
0	↓	X	Q0
1	X	X	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE
Q0 ; NO CHANGE

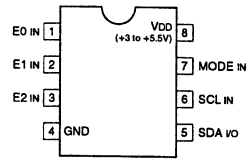


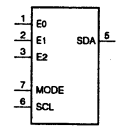
NOTE:

TYPE	VDD
74HC	+2 to +6V
74AC/74VHC	+2 to +5.5V
74ACT/74FCT 74HCT/74VHCT	+4.5 to +5.5V
74LCX	+2 to +3.6V
74LVC	+2.7 to +3.6V

ST24C01FM6TR (SGS)

C-MOS SERIAL ACCESS 1K (128 × 8)-BIT EEPROM
—TOP VIEW—



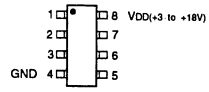


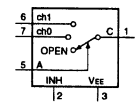
E0 - E2 ; CHIP ENABLE INPUTS
MODE ; WRITE MODE INPUT
SCL ; SERIAL CLOCK INPUT
SDA ; SERIAL DATA ADDRESS INPUT/OUTPUT

TC4W53F (TOSHIBA)CHIP PACKAGE(5.0 X 3.1)
TC4W53F(TE12R)

C-MOS 2-CHANNEL MULTIPLEXER / DEMULTIPLEXER

—TOP VIEW—



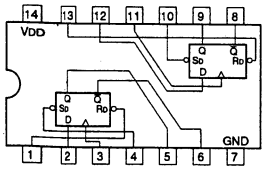


CONT.INPUT		ON
INH	A	CHANNEL
0	0	ch0
0	1	ch1
1	X	OPEN

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

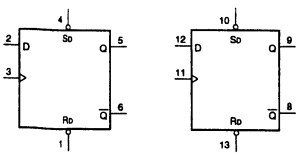
SN74HC74ANS (TI)FLAT PACKAGE
SN74HC74ANS-E05

C-MOS DUAL D-TYPE FLIP-FLOPS WITH DIRECT SET/RESET
—TOP VIEW—



INPUTS				OUTPUTS	
$\overline{SD}$	$\overline{RD}$	CK	D	Qn+1	$\overline{Qn+1}$
0	1	X	X	1	0
1	0	X	X	0	1
0	0	X	X	1	1
1	1	↑	1	1	0
1	1	↑	0	0	1
1	1	0	X	Qn	$\overline{Qn}$

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

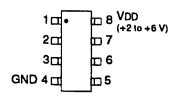


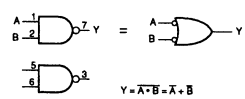
NOTE:

TYPE	VDD
74HCT/74ACT	+4.5 to +5.5V
74LVC	+2.7 to +3.6V
74AC/74VHC	+2 to +5.5V
OTHERS	+2 to +6V

TC7W00F(TE12R) (TOSHIBA)CHIP PACKAGE

C-MOS DUAL 2-INPUT NAND GATE
—TOP VIEW—





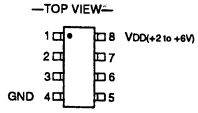
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

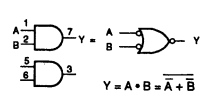
0 ; LOW LEVEL
1 ; HIGH LEVEL

TC7W08F (TOSHIBA)CHIP PACKAGE
TC7W08F(TE12R)

C-MOS 2-INPUT AND GATE

—TOP VIEW—



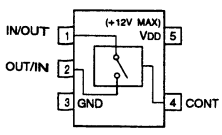


A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0 ; LOW LEVEL
1 ; HIGH LEVEL

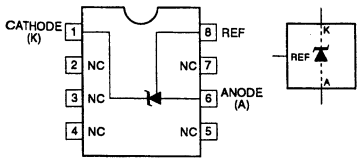
TC7S66F (TOSHIBA)
TC7S66F(TE85R)

C-MOS ANALOG SWITCH
—TOP VIEW—



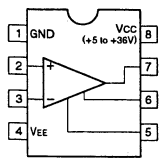
TL431CPS (TI)FLAT PACKAGE
TL431CPS-E20

ADJUSTABLE PRECISION SHUNT REGULATOR
—TOP VIEW—



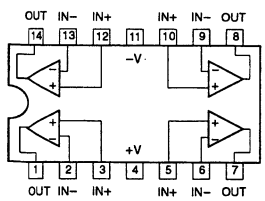
UPC311G2 (NEC)FLAT PACKAGE
UPC311G2-E2

VOLTAGE COMPARATOR
—TOP VIEW—



UPC324G2 (NEC)FLAT PACKAGE
UPC324G2-E2

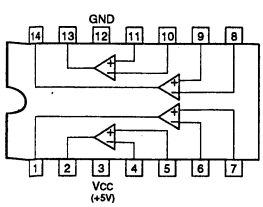
QUAD OPERATIONAL AMPLIFIERS
—TOP VIEW—



	+V	−V
SINGLE SUPPLY	+3 to +32V	GND
DUAL SUPPLIES	+1.5 to +16V	−1.5 to −16V

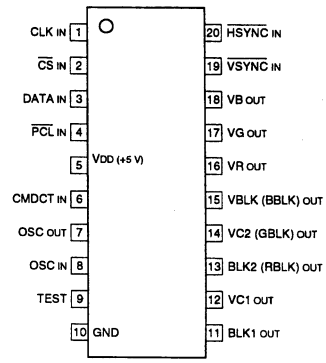
UPC339G2-E2 (NEC)FLAT PACKAGE

QUAD COMPARATORS
—TOP VIEW—



UPD6466GS-502-E2 (NEC)

C-MOS ON-SCREEN CHARACTER DISPLAY
—TOP VIEW—



INPUT

CLK	; CLOCK
CS	; CHIP SELECT
CMDCT	; COMMAND SELECT
DATA	; SERIAL DATA
HSYNC	; HORIZONTAL SYNC
OSC	; OSCILLATOR
PCL	; POWER ON CLEAR
VSYNC	; VERTICAL SYNC

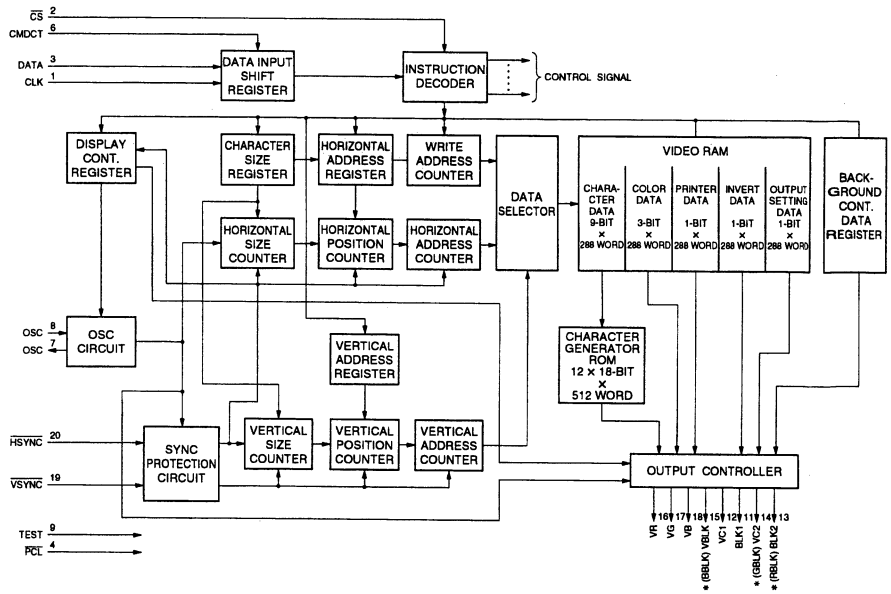
OUTPUT

BLK1, BLK2	; BLANKING 1, 2
BBLK	; BLANKING B
OSC	; OSCILLATOR
GBLK	; BLANKING G
RBLK	; BLANKING R
VBLK	; BLANKING
VC1, VC2	; CHARACTER 1, 2
VR, VG, VB	; CHARACTER R, G, B

OTHER

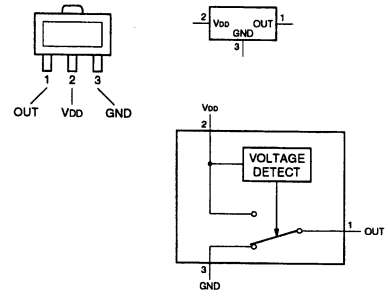
TEST	; TEST

* IN ( ) ARE SET BY SETTING WITH INITIAL CONDITION SETTING COMMAND.



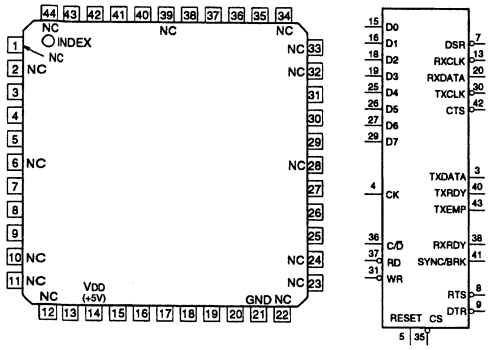
S-8054ALB-LM-S (SEIKO I AND E)4.00 – 4.30 V
S-8054ALB-LM-T1

C-MOS VOLTAGE DETECTOR
—TOP VIEW—



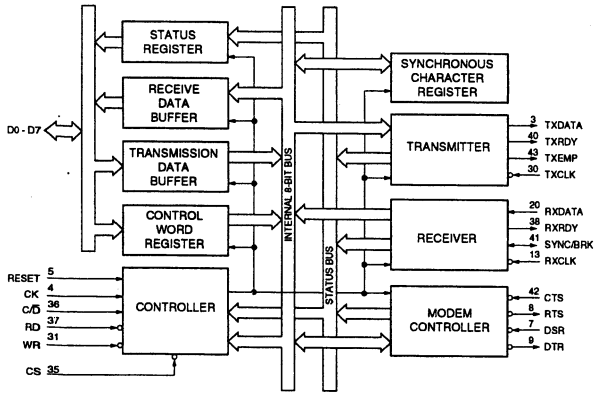
UPD71051GU-10 (NEC)FLAT PACKAGE
UPD71051GU-10-E2

C-MOS SERIAL CONTROLLER
—TOP VIEW—



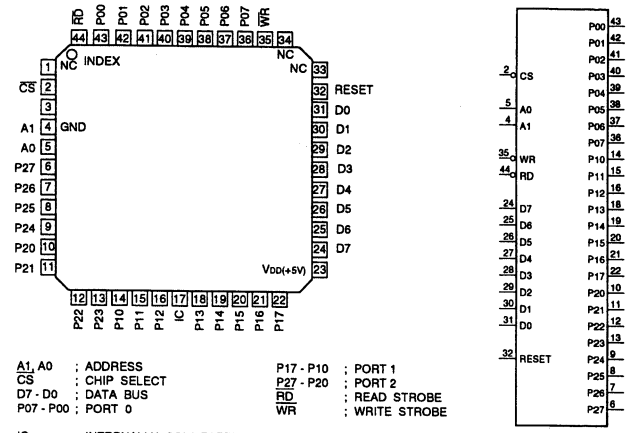
PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL	PIN No.	I/O	SYMBOL
1	—	NC	12	—	NC	23	—	NC	34	—	NC
2	—	NC	13	I	$\overline{RXCLK}$	24	—	NC	35	I	$\overline{CS}$
3	O	TXDATA	14	—	VDD(+5V)	25	I/O	D4	36	I	$\overline{C/D}$
4	I	CK	15	I/O	D0	26	I/O	D5	37	I	$\overline{RD}$
5	I	RESET	16	I/O	D1	27	I/O	D6	38	O	RXRDY
6	—	NC	17	—	IC	28	—	NC	39	—	NC
7	I	DSR	18	I/O	D2	29	I/O	D7	40	O	TXRDY
8	O	$\overline{RTS}$	19	I/O	D3	30	I	$\overline{TXCLK}$	41	I/O	SYNC/BRK
9	O	$\overline{DTR}$	20	I	RXDATA	31	I	$\overline{WR}$	42	I	$\overline{CTS}$
10	—	NC	21	—	GND	32	—	NC	43	O	TXEMP
11	—	NC	22	—	NC	33	—	NC	44	—	NC

CK ; CLOCK INPUT
CS ; CHIP SELECT INPUT
CTS ; CLEAR TO SEND OUTPUT
C/D ; CONTROL/DATA SELECT INPUT
D0 - D7 ; DATA INPUTS/OUTPUTS
DSR ; DATA SET READY INPUT
DTR ; DATA TERMINAL READY OUTPUT
TXCLK ; TRANSMITTER CLOCK INPUT
TXDATA ; TRANSMIT DATA OUTPUT
TXEMP ; TRANSMITTER EMPTY OUTPUT
TXRDY ; TRANSMIT READY OUTPUT
RD ; READ STROBE INPUT
RESET ; RESET INPUT
RTS ; REQUEST TO SEND OUTPUT
RXCLK ; RECEIVER CLOCK INPUT
RXDATA ; RECEIVE DATA INPUT
RXRDY ; RECEIVER READY OUTPUT
SYNC/BRK ; SYNCHRONIZATION/BREAK INPUT/OUTPUT
WR ; WRITE STROBE INPUT



UPD71055GB-3B4 (NEC)FLAT PACKAGE

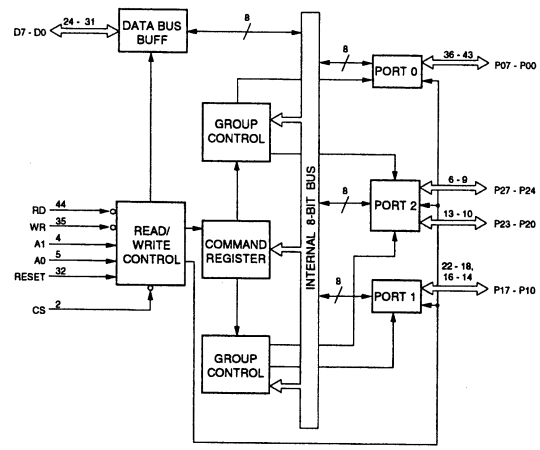
C-MOS PARALLEL INTERFACE UNIT
—TOP VIEW—



A1, A0 ; ADDRESS
CS ; CHIP SELECT
D7 - D0 ; DATA BUS
P07 - P00 ; PORT 0
P17 - P10 ; PORT 1
P27 - P20 ; PORT 2
RD ; READ STROBE
WR ; WRITE STROBE
IC ; INTERNALLY CONNECTED

CS	RD	WR	A1	A0	OPERATION	CPU ACTION
0	0	1	0	0	PORT0 → DATA • BUS	INPUT
0	0	1	0	1	PORT1 → DATA • BUS	INPUT
0	0	1	1	0	PORT2 → DATA • BUS	INPUT
0	0	1	1	1	DISABLE	
0	0	0	×	×		
0	1	0	0	0	DATA • BUS → PORT0	OUTPUT
0	1	0	0	1	DATA • BUS → PORT1	OUTPUT
0	1	0	1	0	DATA • BUS → PORT2	OUTPUT
0	1	0	1	1	DATA • BUS → COMMAND REGISTER	OUTPUT
0	1	1	×	×	HIGH IMPEDANCE	
1	×	×	×	×		

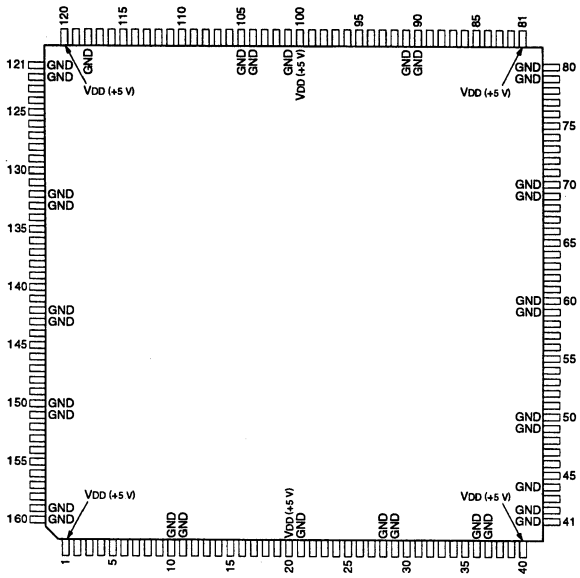
0 ; LOW LEVEL
1 ; HIGH LEVEL
× ; DON'T CARE



CXD8677Q (SONY)

C-MOS GATE ARRAY

—TOP VIEW—



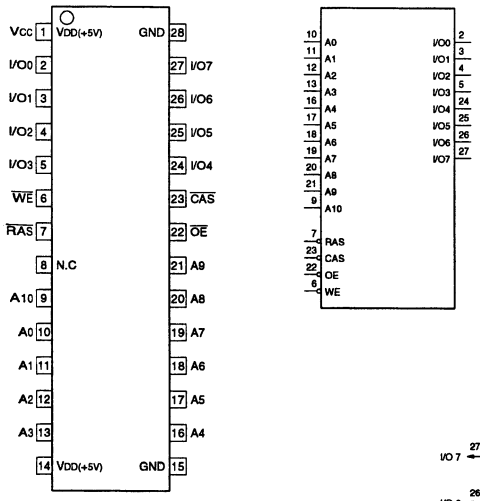
(VDD = +5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	—	VDD	33	O	DA2	65	O	PDO12	97	I	CPUA5	129	O	NIFCSO
2	I	SD7	34	O	DA1	66	O	PDO13	98	I	CPUA6	130	O	NIFWR
3	I	SD6	35	O	DA0	67	O	PDO14	99	I	CPUA7	131	O	NIFRD
4	I	SD5	36	—	GND	68	O	PDO15	100	—	VDD	132	—	GND
5	I	SD4	37	—	GND	69	—	GND	101	—	GND	133	—	GND
6	I	SD3	38	O	NCAS	70	—	GND	102	I	CPUA8	134	I/O	IFD0
7	I	SD2	39	O	NRAS	71	O	PDO16	103	I	CPUA9	135	I/O	IFD1
8	I	SD1	40	—	VDD	72	O	PDO17	104	—	GND	136	I/O	IFD2
9	I	SD0	41	—	GND	73	O	PDO18	105	—	GND	137	I/O	IFD3
10	—	GND	42	—	GND	74	O	PDO19	106	O	NSTOP	138	I/O	IFD4
11	—	GND	43	O	NDWE	75	O	PDO20	107	O	CPUREF	139	I/O	IFD5
12	I/O	DD7	44	—	GND	76	O	PDO21	108	O	NCPUINT2	140	I/O	IFD6
13	I/O	DD6	45	O	DLYCLK0	77	O	PDO22	109	O	NCPUINT1	141	I/O	IFD7
14	I/O	DD5	46	O	DLYCLK1	78	O	PDO23	110	O	NCPUINT0	142	—	GND
15	I/O	DD4	47	O	DLYCLK2	79	—	GND	111	I	NDMAEN	143	—	GND
16	I/O	DD3	48	O	DLYCLK3	80	—	GND	112	I	NAREALD	144	O	IFA0
17	I/O	DD2	49	—	GND	81	—	VDD	113	I	CPUMOD	145	O	IFA1
18	I/O	DD1	50	—	GND	82	I/O	CPUD7	114	I	CUP	146	O	IFA2
19	I/O	DD0	51	O	PDO0	83	I/O	CPUD6	115	O	DMABSY	147	O	IFA3
20	—	VDD	52	O	PDO1	84	I/O	CPUD5	116	I	NCPURD	148	O	IFA4
21	—	GND	53	O	PDO2	85	I/O	CPUD4	117	I	NCPUWR	149	O	IFA5
22	O	DA11	54	O	PDO3	86	I/O	CPUD3	118	—	GND	150	—	GND
23	O	DA10	55	O	PDO4	87	I/O	CPUD2	119	I	CLK	151	—	GND
24	O	DA9	56	O	PDO5	88	I/O	CPUD1	120	—	VDD	152	I	NINT0
25	O	DA8	57	O	PDO6	89	I/O	CPUD0	121	—	GND	153	I	NINT1
26	O	DA7	58	O	PDO7	90	—	GND	122	—	GND	154	I	NINT2
27	O	DA6	59	—	GND	91	—	GND	123	I	NRES	155	I	NSTB
28	—	GND	60	—	GND	92	I	CPUA0	124	I	NIFCSI	156	O	NSRED
29	—	GND	61	O	PDO8	93	I	CPUA1	125	I	NCPUCS2	157	O	NSDACK
30	O	DA5	62	O	PDO9	94	I	CPUA2	126	I	NCPUCS1	158	I	SDRQ
31	O	DA4	63	O	PDO10	95	I	CPUA3	127	I	NCPUCS0	159	—	GND
32	O	DA3	64	O	PDO11	96	I	CPUA4	128	I	TEST	160	—	GND

HM5117800CJ-6EL (HITACHI)

C-MOS 2,097,152-WORD × 8-BIT DYNAMIC RAM

—TOP VIEW—

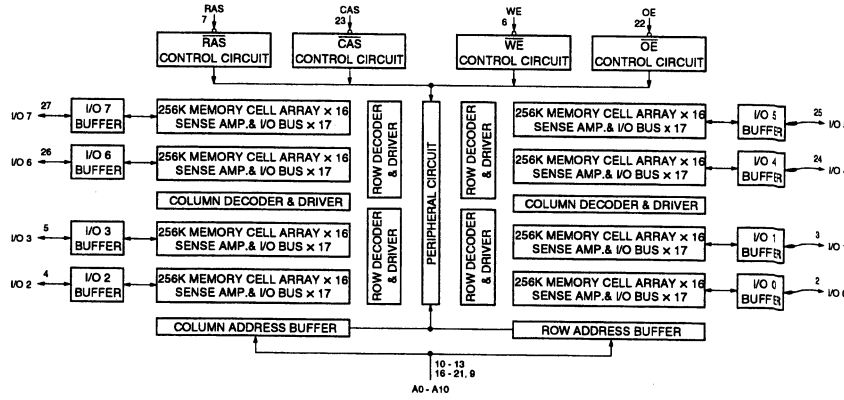


INPUT

A0 - A10 ; ADDRESS
$\overline{RAS}$; ROW ADDRESS STROBE
$\overline{CAS}$; COLUMN ADDRESS STROBE
$\overline{OE}$; OUTPUT ENABLE
$\overline{WE}$; WRITE ENABLE

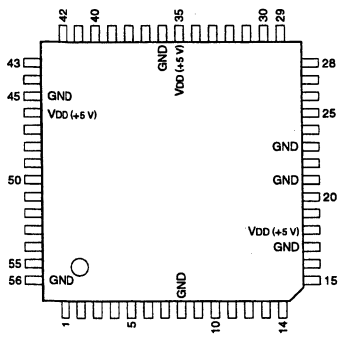
INPUT/OUTPUT

I/O0 - I/O7 ; DATA INPUT/OUTPUT



TE6137 (TOKYO ELECTRON)

C-MOS IEEE 1284 PERIPHERAL CONTROLLER
—TOP VIEW—



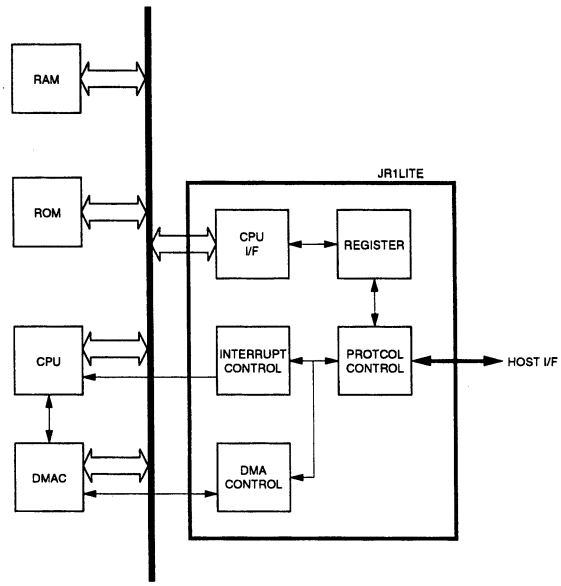
(VDD = +5 V)

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	O	BPoINT2	15	I/O	bD1	29	I	BPiDEND1	43	I/O	BPbD1
2	O	BPoINT1	16	I/O	bD0	30	I	BPiDAK0	44	I/O	BPbD0
3	O	BPoINT0	17	—	GND	31	O	BPo	45	—	GND
4	I	iA3	18	—	VDD	32	O	BPoDEND0	46	—	VDD
5	I	iA2	19	I	iRD/RW	33	I	BPiCLS	47	I	BPiSEI
6	I	iA1	20	I	iWR/EN	34	O	BPoRT	48	I	BPiAF
7	I	iA0	21	—	GND	35	—	VDD	49	I	BPiINI
8	—	GND	22	I	BPiCLK	36	—	GND	50	I	BPiSTB
9	I/O	bD7	23	—	GND	37	I/O	BPbD7	51	O	BPoPE
10	I/O	bD6	24	I	iRST	38	I/O	BPbD6	52	O	BPoACK
11	I/O	bD5	25	I	iCIS	39	I/O	BPbD5	53	O	BPoBY
12	I/O	bD4	26	I	iCS	40	I/O	BPbD4	54	O	BPoFT
13	I/O	bD3	27	I	BPiDAK1	41	I/O	BPbD3	55	O	BPoSE
14	I/O	bD2	28	O	BPoDRQ1	42	I/O	BPbD2	56	—	GND

INPUT
BPiAF : COMPATIBILITY = n AUTO Fd
BPiCLK : CLOCK
BPiCLS : COMPATIBILITY MODE LEVEL SELECT
BPiDAK0 : DMA ACKNOWLEDGE0
BPiDAK1 : DMA ACKNOWLEDGE1
BPiDEND1 : DMA END1
BPiINI : COMPATIBILITY = n INITIAL
BPiSEI : COMPATIBILITY = n SELECT IN
BPiSTB : COMPATIBILITY = n STROBE
iA0 - iA3 : ADDRESS
iCIS : CPU INTERFACE SELECT
iCS : CHIP SELECT
iRD/WR : READ/READ WRITE SELECT
iRST : RESET
iWR/EN : WRITE/ENABLE

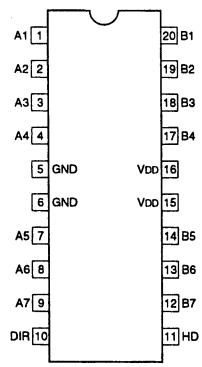
OUTPUT
BPoACK : COMPATIBILITY = n ACK
BPoBY : COMPATIBILITY = BUSY
BPoDEND0 : DMA END0
BPoDRQ0 : DMA REQUEST0
BPoDRQ1 : DMA REQUEST1
BPoFT : COMPATIBILITY = n FAULT
BPoINT0 : INTERRUPT REQUEST0
BPoINT1 : INTERRUPT REQUEST1
BPoINT2 : INTERRUPT REQUEST2
BPoPE : COMPATIBILITY = P ERROR
BPoRT : INDICATE REVERSE TRANSFER
BPoSE : COMPATIBILITY = SELECT

INPUT/OUTPUT
bD0 - bD7 : DATA BUS
BPbD0 - BPbD7 : COMPATIBILITY = DATA



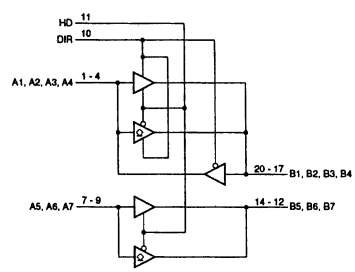
SN74ACT1284NS-E05 (TI)

C-MOS 7-BIT BUS INTERFACE 3-STATE OUTPUT
—TOP VIEW—



INPUTS DIR	INPUTS HD	OUTPUT	MODE
0	1	OPEN DRAIN	A TO B: BITS 5, 6, 7
		TOTEM POLE	B TO A: BITS 1, 2, 3, 4
0	1	TOTEM POLE	B TO A: BITS 1, 2, 3, 4 AND A TO B: BITS 5, 6, 7
1	0	OPEN DRAIN	A TO B: BITS 1, 2, 3, 4, 5, 6, 7
1	1	TOTEM POLE	A TO B: BITS 1, 2, 3, 4, 5, 6, 7

0 ; LOW LEVEL
1 ; HIGH LEVEL



SECTION 8
SPARE PARTS

8-1. NOTES ON SPARE PARTS

(1) Safety Related Components Warning
Components marked ⚠ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

(2) Standardization of Parts
Spare parts supplied from Sony Parts Center may not be always identical with the parts which actually in use due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts".
This manual's exploded views and electrical spare parts list are indicating the part numbers of "the standardized genuine parts at present" .

(3) Stock of Parts
Parts marked with "o" SP (Supply Code) column of the spare parts list are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.

(4) Units for Capacitors, Inductors and Resistors
The following units are assumed in schematic diagrams, electrical parts list and exploded views unless otherwise specified.

Capacitors : μF
Inductors : μH
Resistors : Ω

8-1. 補修用部品注意事項

(1) 安全重要部品
⚠警告
⚠印のついた部品は安全性を維持するために重要な部品です。したがって，交換する時は必ず指定の部品を使ってください。

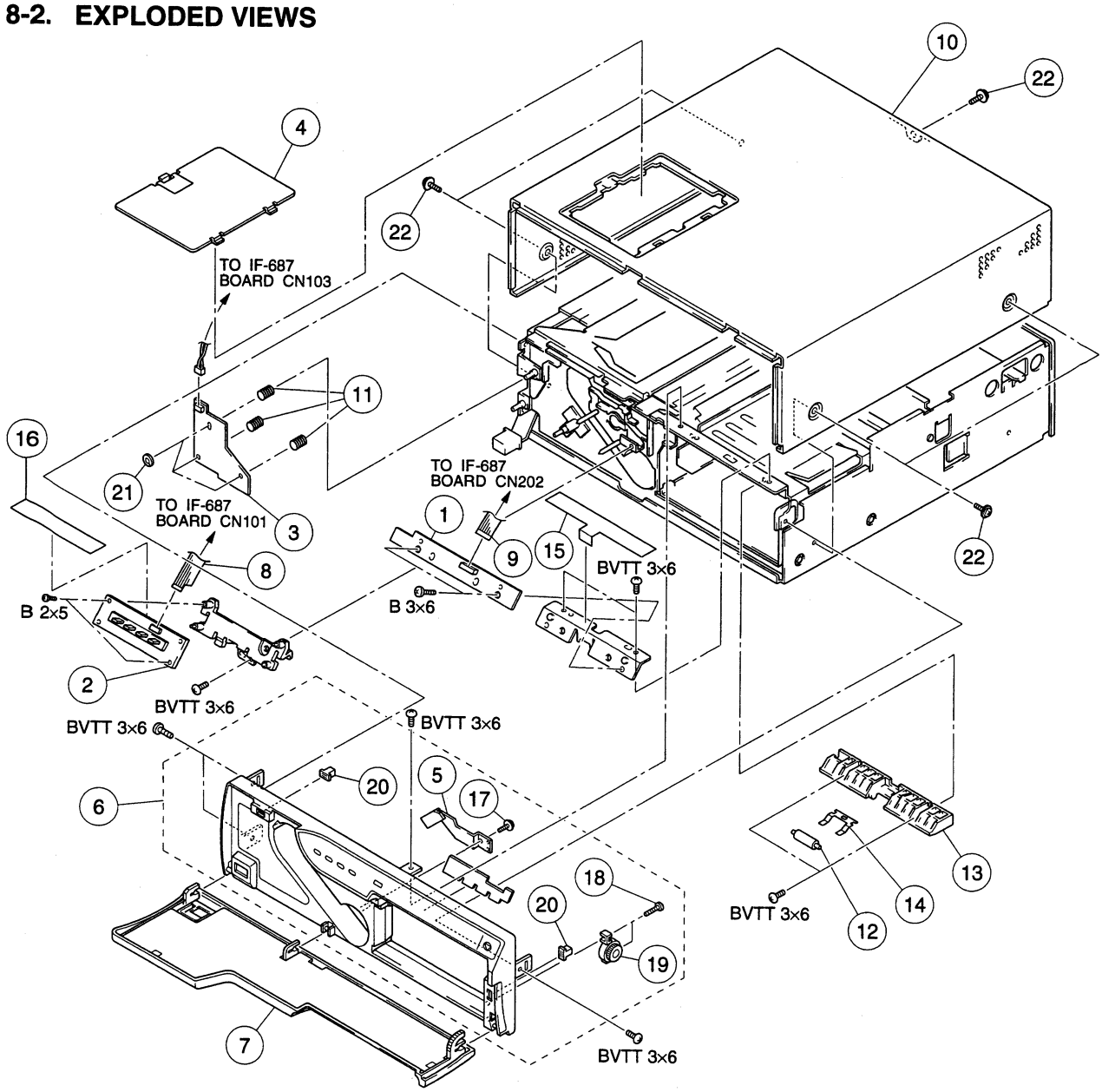
(2) 部品の共通化
ソニーから供給される部品は、セットに実装されているものと異なることがあります。これは部品の共通化、改良等によるものです。
分解図や電気部品表には現時点での共通化された部品が記載されています。

(3) 部品の在庫
部品表のSP (Supply code) 欄にoで示される部品は交換頻度が低い部品ですので在庫していないことがあり、納期が長くなることがあります。

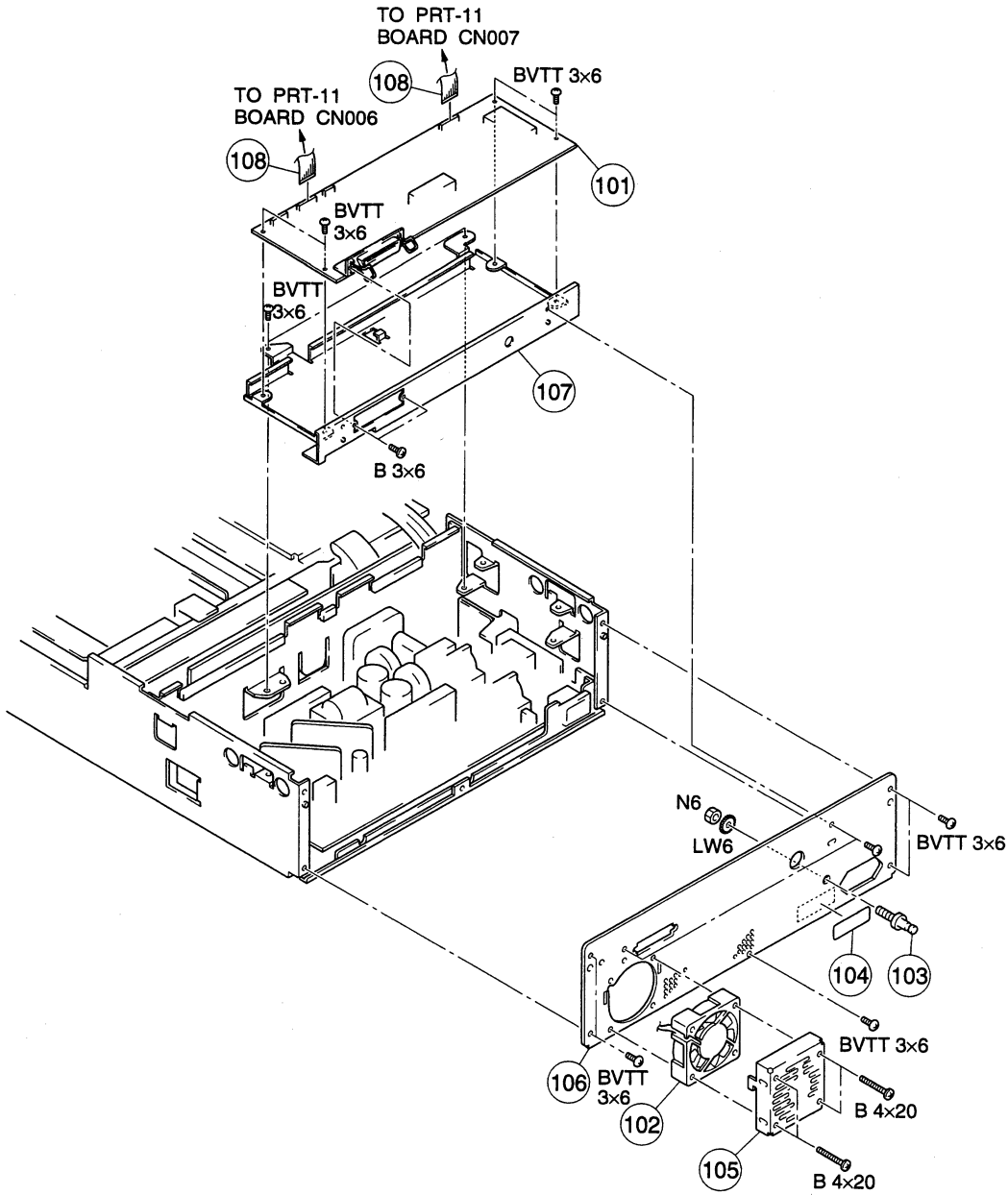
(4) コンデンサー、インダクター、抵抗の単位
回路図、分解図、電気部品表中、特に明記したものを除き、下記の単位は省略されています。

コンデンサー : μF
インダクター : μH
抵抗 : Ω

8-2. EXPLODED VIEWS

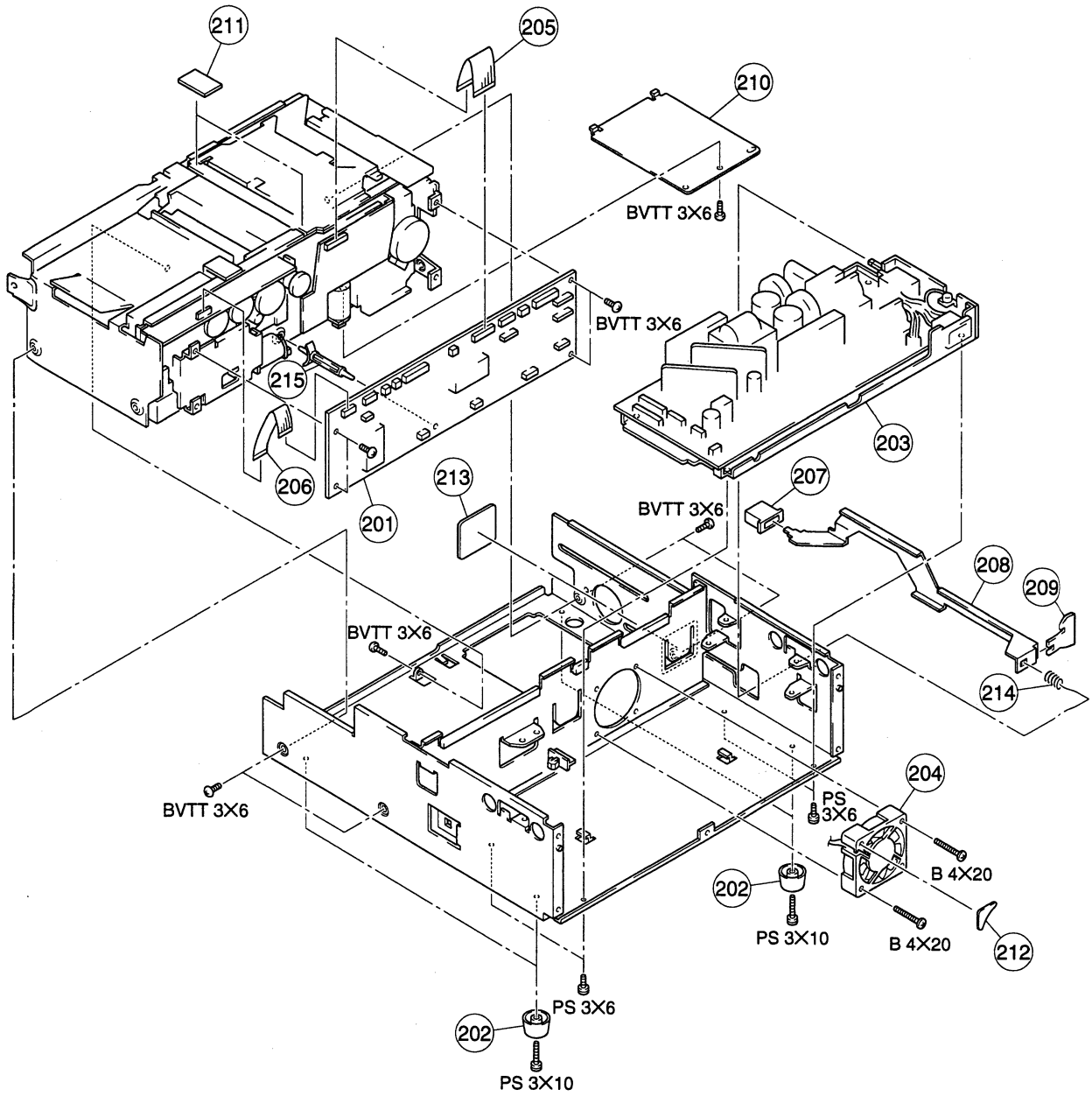


No.	Part No.	SP	Description
1	A-8316-188-A	o	MOUNTED CIRCUIT BOARD, KY-401(D) [for UP-D2500]
	A-8316-464-A	o	MOUNTED CIRCUIT BOARD, KY-401(3P) [for UP-D2550]
2	A-8316-194-A	o	MOUNTED CIRCUIT BOARD, LE-190
3	A-8316-356-A	o	MOUNTED CIRCUIT BOARD, KY-422
4	X-3679-335-3	o	LID ASSY, TOP COVER
5	X-3679-336-1	s	SPRING ASSY, RIBBON EJECT
6	X-3679-377-2	s	PANEL ASSY, FRONT [for UP-D2500]
	X-3679-409-1	s	PANEL ASSY, FRONT (D2550) [for UP-D2550]
7	X-3679-378-1	s	DOOR ASSY, FRONT (D2500) [for UP-D2500]
	X-3679-410-1	s	DOOR ASSY, FRONT (D2550) [for UP-D2550]
8	1-782-729-11	s	WIRE, FLAT TYPE (7-CORE) [for J,UC]
	1-782-906-11	s	WIRE, FLAT (WITH SHIELD) (7-CORE) [for CE]
9	1-782-730-11	s	WIRE, FLAT TYPE (14-CORE)
10	3-608-956-02	o	COVER, TOP
11	3-609-320-01	s	SPRING, COMPRESSION
12	3-609-524-01	s	ROLLER, SUPPORT PAPER EJECT
13	3-609-527-01	s	GUIDE, PAPER FRONT
14	3-609-529-01	s	SPRING, ROLLER PAPER EJECT
15	3-611-669-01	o	SHEET, KY
16	3-611-670-01	o	SHEET, ELECTROSTATIC
17	3-669-480-21	s	SCREW, + PTPWH 2
18	3-713-790-31	s	SCREW (M2X8), TAPPING, P3
19	3-721-204-11	s	DAMPER
20	3-736-779-21	s	MAGNET
21	4-862-338-00	s	RING, STOPPER
22	4-886-821-11	s	SCREW, M3 CASE

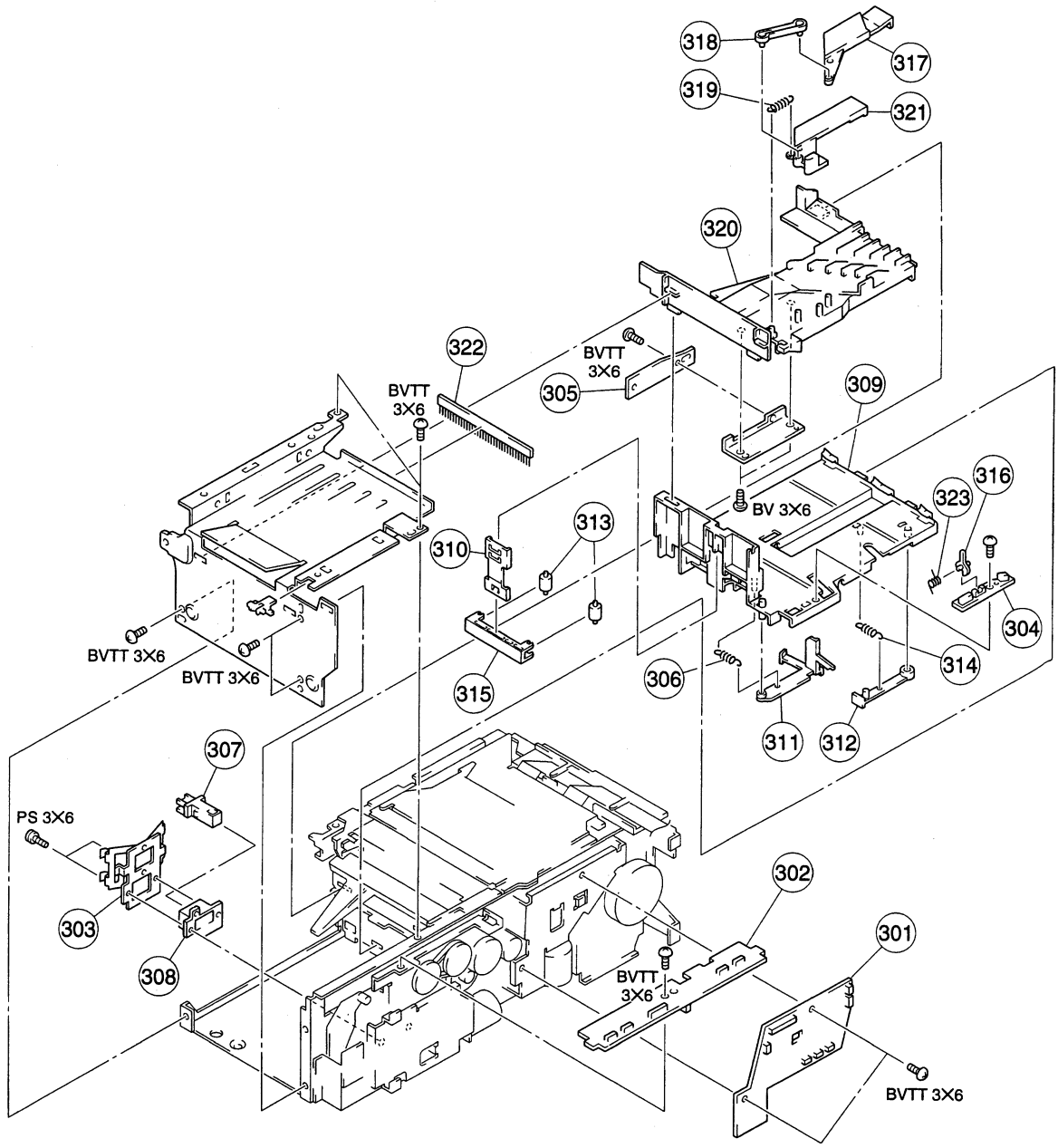


No.	Part No.	SP	Description
101	A-8316-192-A	o	MOUNTED CIRCUIT BOARD, IF-687 [for UP-D2500]
	A-8316-466-A	o	MOUNTED CIRCUIT BOARD, IF-687(3P) [for UP-D2550]
102	1-541-684-51	s	MOTOR, DC
103	3-175-740-01	s	TERMINAL[for CE]
104	3-179-847-01	o	LABEL(NORTHERN EUROPE), CAUTION[for CE]
105	3-608-999-01	o	COVER, FAN
106	3-609-584-01	o	PANEL, REAR[for J, UC]
	3-609-590-01	o	PANEL, REAR[for CE]
107	3-609-596-01	o	HOLDER, IF
108	1-782-734-11	s	WIRE, FLAT TYPE (14-CORE)

SWITCHING REGULATOR



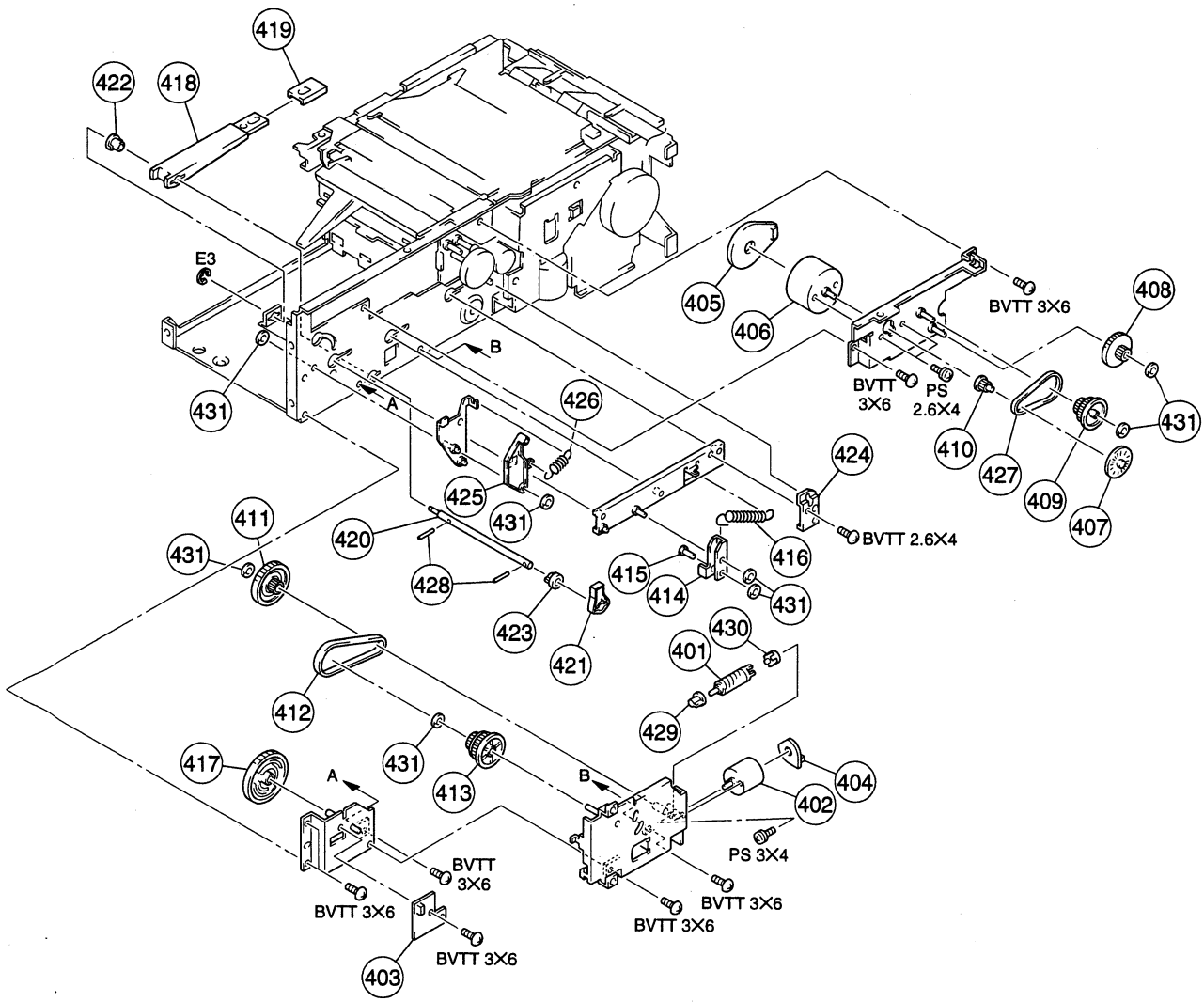
No.	Part No.	SP	Description
201	A-8316-354-A	o	MOUNTED CIRCUIT BOARD, PRT-11 (D)
202	X-3566-109-0	s	FOOT ASSY, MF
203	⚠ 1-468-250-13	s	REGULATOR, SWITCHING
	(⚠ 1-576-232-41	s	FUSE 5A 250V)
204	1-541-684-51	s	MOTOR, DC
205	1-782-735-11	s	WIRE, FLAT TYPE (22-CORE)
206	1-782-736-11	s	WIRE, FLAT TYPE (12-CORE)
207	2-431-568-31	s	BUTTON, POWER
208	3-608-957-01	o	ROD, POWER SWITCH
209	3-608-958-01	s	STOPPER, ROD
210	3-609-303-01	o	LID, MECHA CHASISS
211	3-609-678-01	o	SPACER
212	3-609-783-01	o	STOPPER, WIRE
213	3-611-257-01	o	SHEET, PROTECTION
214	3-611-601-01	s	SPRING, COMPRESSION
215	3-703-353-12	o	SUPPORTER, PC BOARD



No.	Part No.	SP	Description
301	A-8315-872-A	o	MOUNTED CIRCUIT BOARD, SE-417
302	A-8315-874-A	o	MOUNTED CIRCUIT BOARD, SE-418
303	X-3679-339-1	o	SPRING ASSY, PAPER PUSH
304	1-666-986-11	o	PRINTED CIRCUIT BOARD, SE-426
305	1-666-998-11	o	PRINTED CIRCUIT BOARD, SE-430
306	3-183-184-01	s	SPRING, EXTENSION
307	3-193-308-01	s	CATCHER, PUSH
308	3-608-981-02	s	HOLDER, PUSH-CATCHER
309	3-608-983-02	s	RETAINER, PAPER SUPPLY TRAY
310	3-608-988-01	s	SPRING, TRAY PUSH

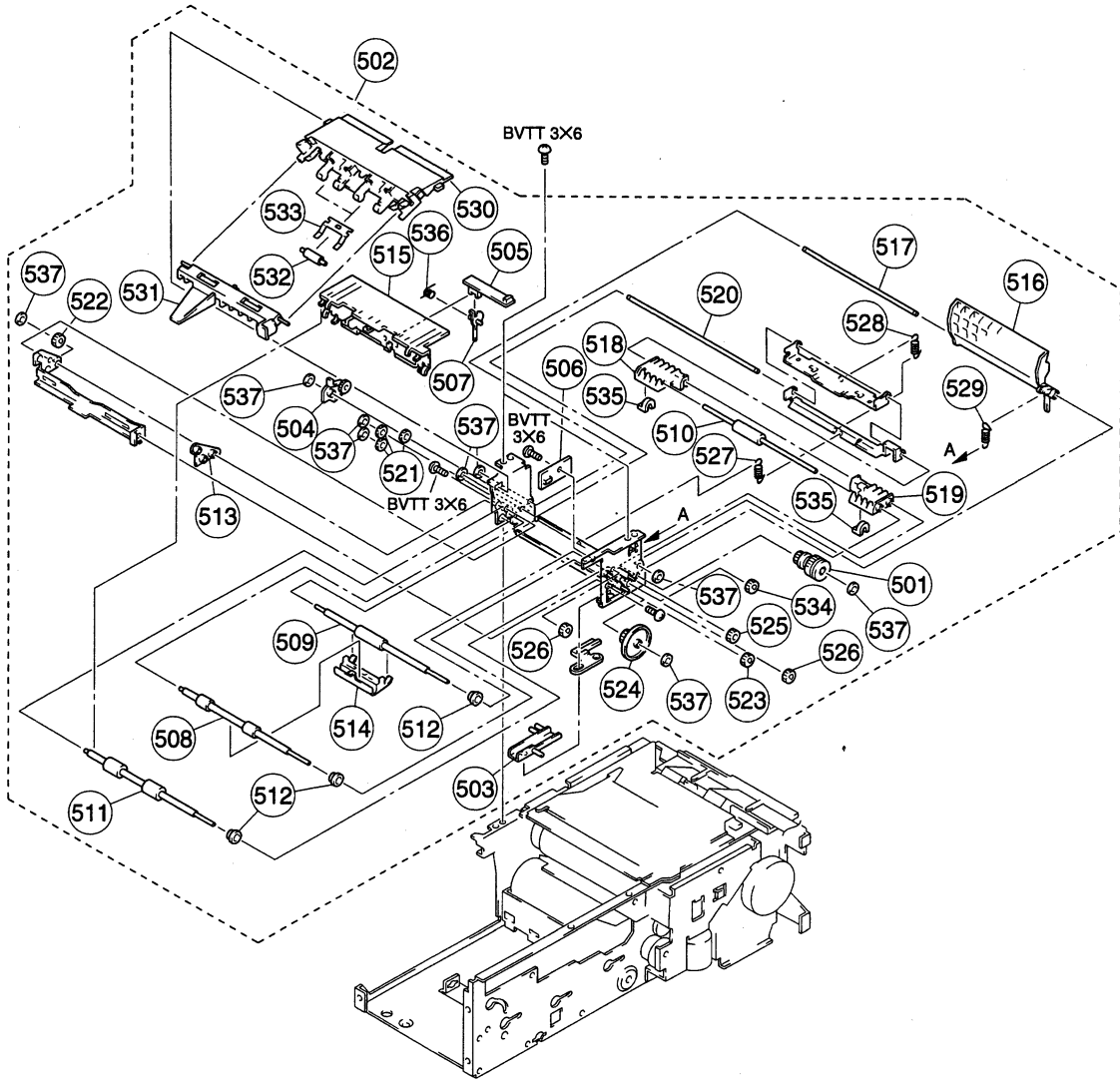
No.	Part No.	SP	Description
311	3-608-989-02	s	ARM, PAPER SENSOR
312	3-608-996-01	s	ARM
313	3-608-997-01	s	ROLLER
314	3-608-998-01	s	SPRING, EXTENSION(TRAY OUT)
315	3-609-309-01	s	HOLDER
316	3-609-353-01	s	ARM, PE SENSOR
317	3-609-509-02	s	LEVER, SUPPORT PAPER EJECT
318	3-609-510-01	s	LEVER, JOINT PAPER EJECT
319	3-609-520-01	s	SPRING, EXTENSION(PE A)
320	3-609-525-02	s	BASE, PAPER EJECT
321	3-609-526-02	s	LEVER, PAPER EJECT
322	3-609-530-01	o	ELIMINATOR, STATIC ELECTRICITY
323	3-683-691-01	s	SPRING, HELICAL TORSION(SENSOR)

MECHANISM BLOCK (2)



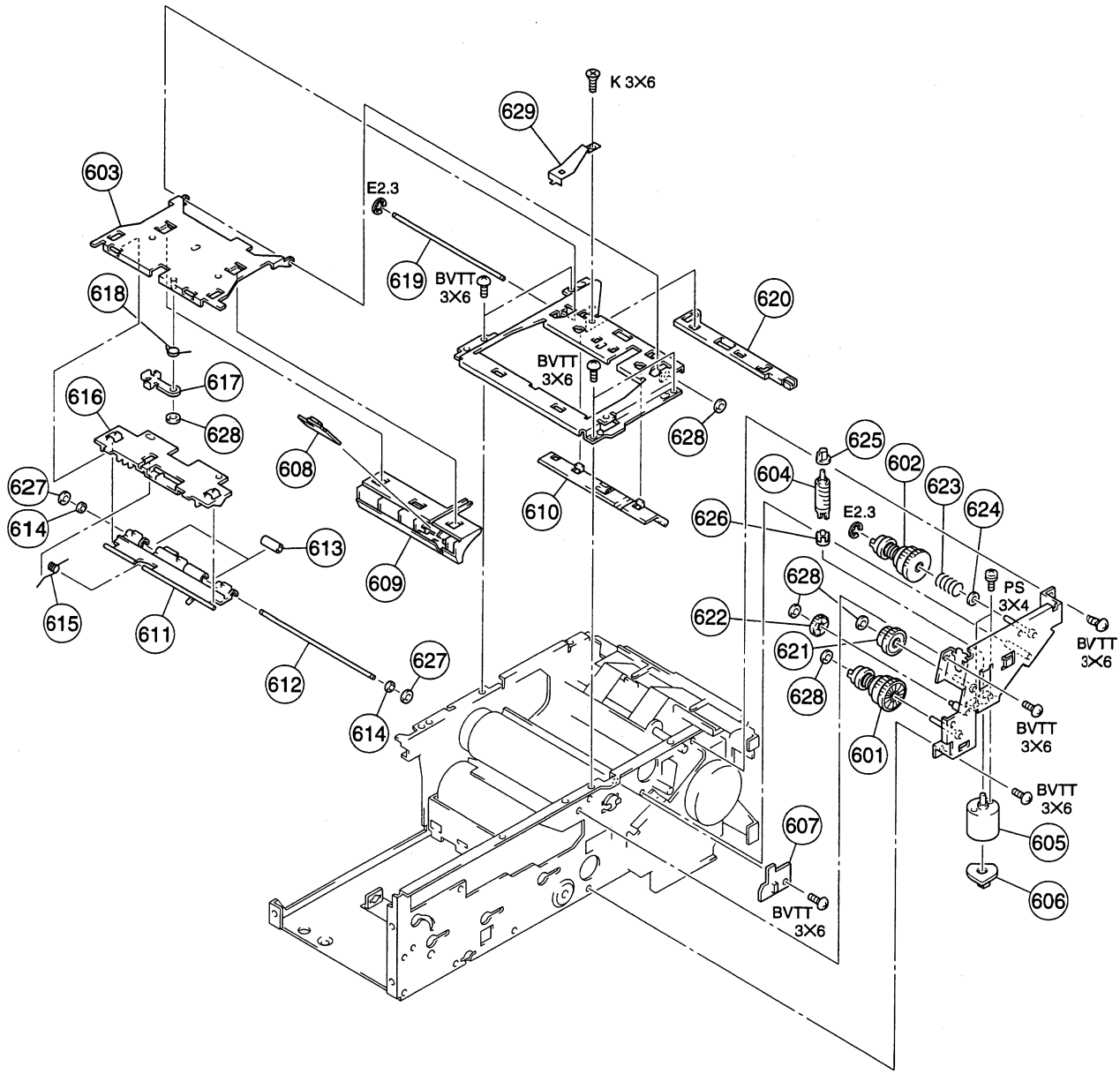
No.	Part No.	SP	Description
401	X-3679-355-1	s	GEAR ASSY, WORM
402	1-541-309-11	s	MOTOR, L(RF-370C)
403	1-666-997-11	o	PRINTED CIRCUIT BOARD, SE-429
404	1-667-001-11	o	PRINTED CIRCUIT BOARD, SU-38
405	1-667-002-11	o	PRINTED CIRCUIT BOARD, SU-39
*406	1-698-323-11	s	MOTOR, DC
407	3-173-567-02	s	FIN, FG
408	3-609-398-01	s	GEAR, PU B
409	3-609-399-01	s	GEAR PULLEY, PU
*410	3-609-400-02	s	PULLEY, PAPER SUPPLY MOTOR
411	3-609-408-02	s	WORM WHEEL, TM
412	3-609-409-01	s	BELT, 110TN15
413	3-609-410-01	s	GEAR PULLEY, TM
414	3-609-417-02	o	LINK, PAPER SUPPLY LEVER
415	3-609-418-01	o	PIN, PS LEVER LINK
416	3-609-419-01	s	SPRING, EXTENSION
417	3-609-422-02	s	CAM, TRAY MOTOR
418	3-609-423-01	o	ARM, PAPER SUPPLY
419	3-609-424-01	s	CAP, ARM
420	3-609-425-01	o	SHAFT, PAPER SUPPLY ARM
421	3-609-426-01	o	LEVER, PAPER SUPPLY
422	3-609-427-01	s	BEARING, AS 4
423	3-609-428-01	s	BEARING, AS 5
424	3-609-429-01	o	PLATE, LINK JOINT
425	3-609-514-01	s	LINK B, PAPER EJECT
426	3-609-521-01	s	SPRING, EXTENSION(PE B)
427	3-686-322-01	s	BELT, 72TN15
428	3-703-357-09	s	PIN (DIA. 1.6 SERISE)
429	3-737-880-01	s	CAP, WORM SHAFT
430	3-737-886-01	s	TABEL, WORM
431	4-926-219-02	s	RING (DIA.2, 3), RETAINING

***NOTE : When replacing the motor of No.406, it is necessory to replace the pulley of No.410.**



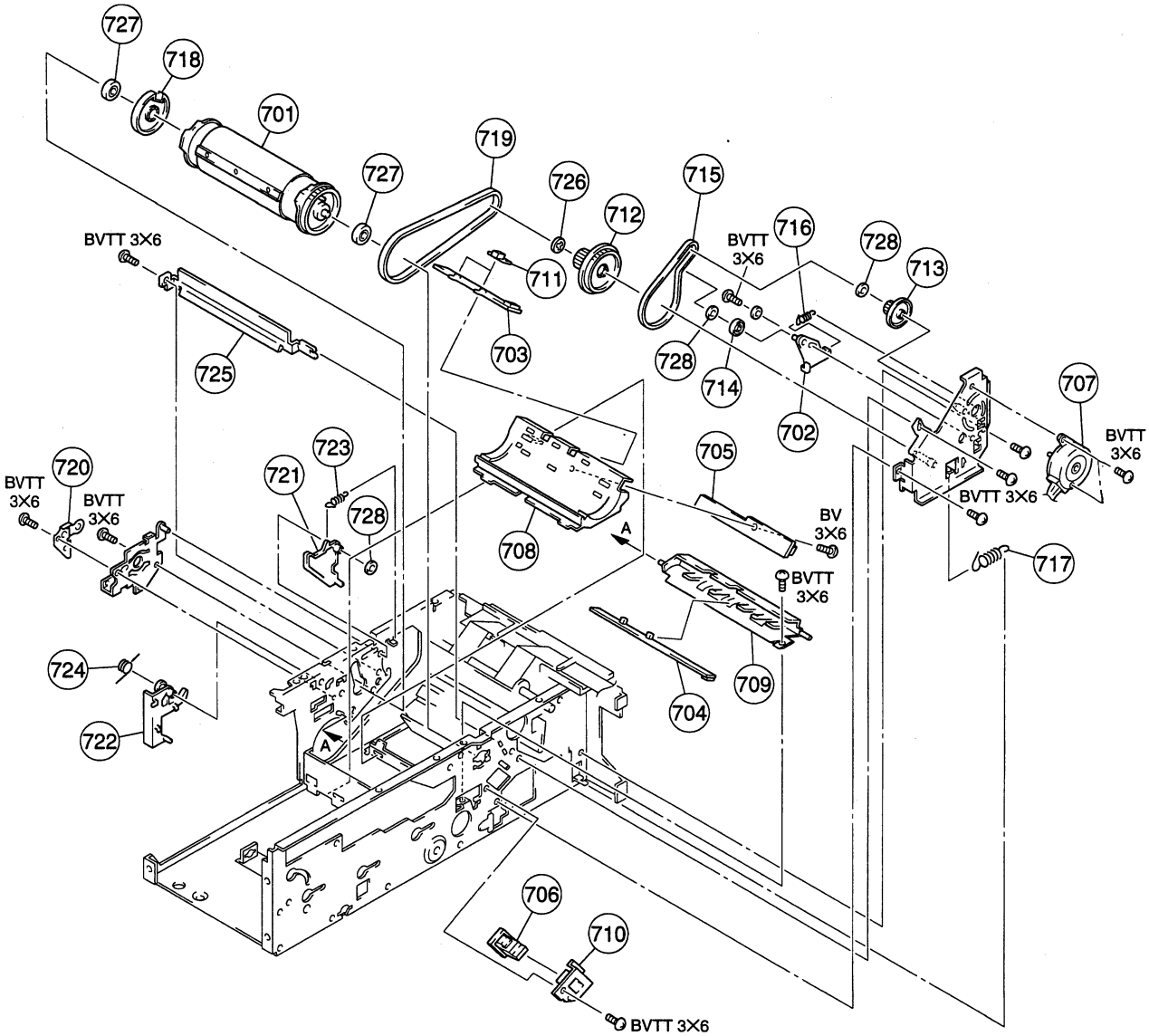
No.	Part No.	SP	Description
501	A-8278-640-A	s	GEAR ASSY, P LIMITER
502	A-8315-915-A	o	PREPARE BLOCK ASSY, PAPER
503	X-3679-353-1	o	LINK ASSY, PS BLOCK
504	X-3679-356-1	s	ARM ASSY, BC
505	1-666-987-11	o	PRINTED CIRCUIT BOARD, SE-427
506	1-666-988-11	o	PRINTED CIRCUIT BOARD, SE-428
507	3-609-353-01	s	ARM, PE SENSOR
508	3-609-369-01	s	ROLLER, PICK UP
509	3-609-370-01	s	ROLLER, PAPER SUPPLY
510	3-609-371-01	s	ROLLER, PAPER SEPARATION
511	3-609-372-01	s	ROLLER, PAPER EJECT
512	3-609-373-02	o	BEARING, ROLLER M
513	3-609-374-01	s	BEARING, ROLLER B
514	3-609-375-01	s	FLAP, PAPER RESTRAIN
515	3-609-376-01	s	GUIDE, P SUPPLY&EJECT ROLLER
516	3-609-377-01	s	FLAP, PAPER LEAD
517	3-609-378-01	o	SHAFT, PL FLAP
518	3-609-380-01	s	BEARING, SEPARATION ROLLER F
519	3-609-381-01	s	BEARING, SEPARATION ROLLER B
520	3-609-382-01	o	SHAFT, SEPARATION ROLLER PIVOT
521	3-609-384-01	s	GEAR, BC B
522	3-609-385-01	s	GEAR, BC C
523	3-609-386-01	s	GEAR, PICK UP
524	3-609-387-01	s	GEAR, PU A
525	3-609-388-01	s	GEAR, P SUPPLY IDLER
526	3-609-389-01	s	GEAR, SEPARATION
527	3-609-391-01	s	SPRING, EXTENSION
528	3-609-392-01	s	SPRING, EXTENSION
529	3-609-394-01	s	SPRING, EXTENSION
530	3-609-500-02	s	GUIDE, PAPER EJECT
531	3-609-523-01	s	FLAP, PAPER EJECT
532	3-609-524-01	s	ROLLER, SUPPORT PAPER EJECT
533	3-609-529-01	s	SPRING, ROLLER PAPER EJECT
534	3-609-700-01	s	GEAR, PAPER SUPPLY
535	3-611-296-01	o	GUIDE, PAPER
536	3-683-691-01	s	SPRING, HELICAL TORSION(SENSOR)
537	4-926-219-02	s	RING (DIA.2.3), RETAINING

MECHANISM BLOCK (4)



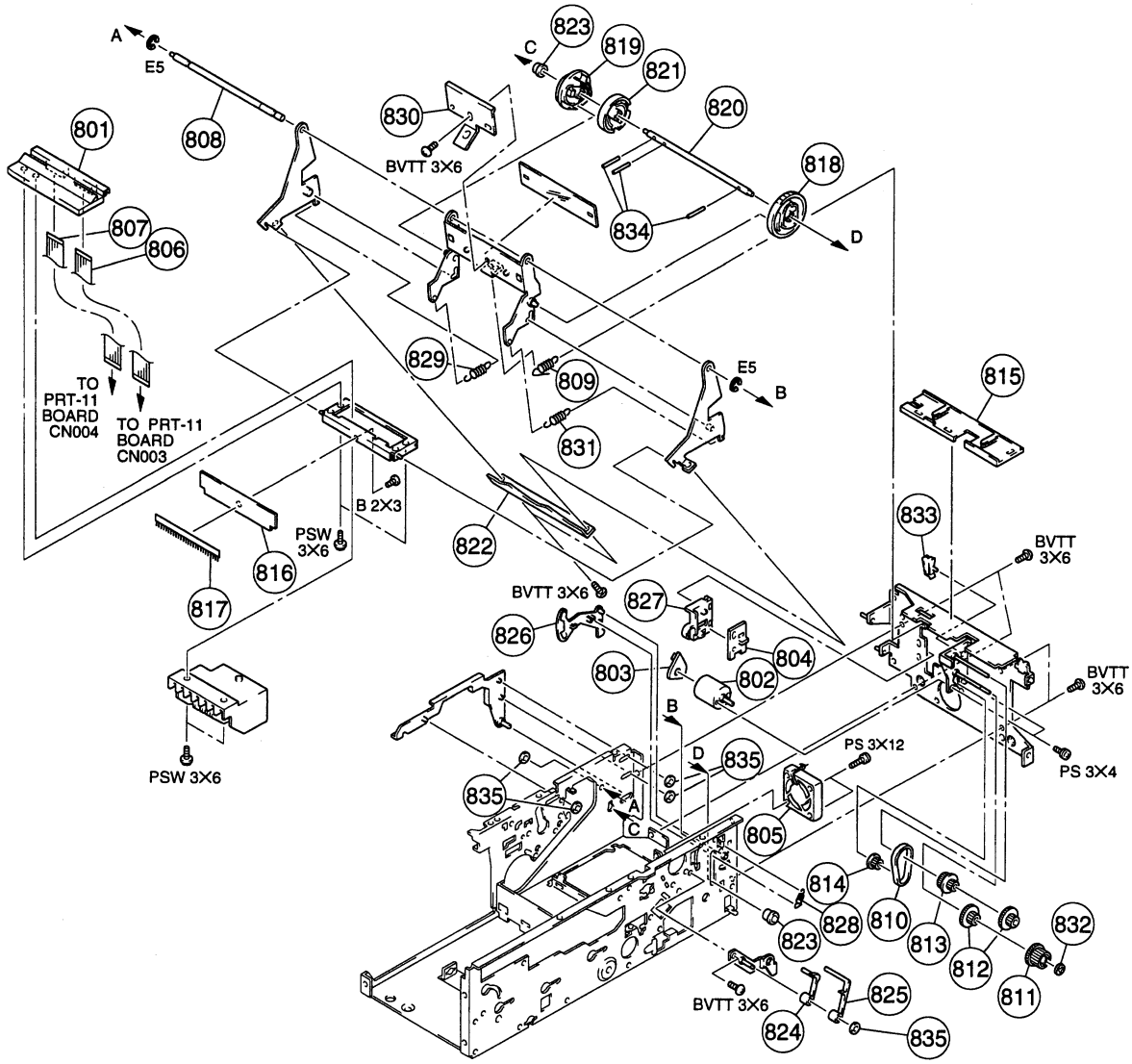
No.	Part No.	SP	Description
601	A-8278-645-A	s	LIMITER ASSY, RIBBON T
602	A-8278-646-A	s	LIMITER ASSY, RIBBON S
603	X-3679-368-1	o	COVER ASSY, PLATEN
604	X-3737-811-1	s	WORM BLOCK ASSY
605	1-541-309-11	s	MOTOR, L (RF-370C)
606	1-667-000-11	o	PRINTED CIRCUIT BOARD, SU-37
607	1-667-005-11	o	PRINHTED CIRCUIT BOARD, SE-419
608	1-667-007-11	o	PRINTED CIRCUIT BOARD, SE-422
609	3-608-985-01	s	GUIDE, RIBBON TP
610	3-608-986-01	s	GUIDE, RIBBON T1
611	3-609-452-02	s	ARM, HOLD PAPER
612	3-609-453-01	o	SHAFT, HOLD PAPER
613	3-609-454-01	s	ROLLER, HOLD PAPER
614	3-609-455-01	s	ROLLER, GUIDE HOLD PAPER
615	3-609-456-01	s	SPRING, TORSION(PAPER HOLD)

No.	Part No.	SP	Description
616	3-609-457-02	s	STAY, PH ARM
617	3-609-458-01	s	LOCK, PLATEN COVER
618	3-609-459-01	s	SPRING, TORSION(PC LOCK)
619	3-609-493-01	o	SHAFT, PLATEN COVER
620	3-609-494-01	s	GUIDE, HEAD HARNESS
621	3-609-498-01	s	WHEEL, RIBBON WORM
622	3-609-499-01	s	GEAR, IDLER RIBBON
623	3-609-519-01	s	SPRING, COMPRESSION (RIBBON B)
624	3-701-445-11	s	WASHER, 7
625	3-737-880-01	s	CAP, WORM SHAFT
626	3-737-886-01	s	TABEL, WORM
627	4-926-218-01	s	RING (DIA.2), RETAINING
628	4-926-219-02	s	RING (DIA.2.3), RETAINING
629	3-611-600-01	s	ROCK, PLATEN COVER[for UC]



No.	Part No.	SP	Description
701	A-8315-909-A	s	PLATEN BLOCK ASSY
702	X-3679-359-1	o	BRACKET ASSY, IDLER PLATEN
703	1-666-983-11	o	PRINTED CIRCUIT BOARD, SE-423
704	1-666-984-11	o	PRINTED CIRCUIT BOARD, SE-424
705	1-666-985-11	o	PRINTED CIRCUIT BOARD, SE-425
706	1-692-960-11	s	SWITCH, PUSH (1 KEY)
707	1-698-555-21	s	MOTOR, STEPPING(PM42S-048-SNA6)
708	3-608-982-01	o	GUIDE, RIBBON U
709	3-608-984-02	s	GUIDE, RIBBON M
710	3-608-987-02	s	HOLDER, RIBBON PUSH-CATCHER
711	3-608-995-01	o	COVER, SENSOR
712	3-609-347-01	s	PULLEY, PLATEN
713	3-609-348-01	s	PULLEY, PLATEN GEAR
714	3-609-349-01	s	IDLER, PLATEN
715	3-609-350-01	s	BELT, 120TN15
716	3-609-351-01	s	SPRING, EXTENSION
717	3-609-352-01	s	SPRING, EXTENSION
718	3-609-477-01	o	CAM, TIMING CHUCK
719	3-609-479-01	s	BELT, 160TN15
720	3-609-482-01	o	SPRING, EARTH PLATEN
721	3-609-486-01	s	LINK B, CHUCK
722	3-609-487-01	s	STOPPER, GEAR BARCORD
723	3-609-491-01	s	SPRING, EXTENSION
724	3-609-492-01	s	SPRING, TORSION(BC STOPPER)
725	3-609-495-01	o	GUIDE, PLATEN
726	3-650-537-00	o	WASHER
727	3-683-140-01	o	FLANGELESS BALL BEARING
728	4-926-219-02	s	RING (DIA.2.3), RETAINING

MECHANISM BLOCK (6)



No.	Part No.	SP	Description
801	1-500-474-11	s	HEAD, THERMAL (LV6103)
*802	1-541-309-11	s	MOTOR, L(RF-370C)
803	1-666-999-11	o	PRINTED CIRCUIT BOARD, SU-36
804	1-667-006-11	o	PRINTED CIRCUIT BOARD, SE-420
805	1-763-007-11	s	FAN, DC
806	1-782-738-11	s	WIRE, FLAT TYPE (21 CORE)
807	1-782-739-11	s	WIRE, FLAT TYPE (19 CORE)
808	3-609-437-01	o	SHAFT, LINK HEAD
809	3-609-438-01	s	SPRING, EXTENSION
810	3-609-444-01	s	BELT, 79TN15
811	3-609-445-01	s	GEAR A, HEAD
812	3-609-446-01	s	GEAR B, HEAD
813	3-609-447-01	s	PULLEY, GEAR, HEAD
*814	3-609-448-01	s	PULLEY, HEAD MOTOR
815	3-609-449-01	s	CLAMP, HARNESS
816	3-609-471-01	o	GUIDE, RIBBON
817	3-609-472-01	o	ELIMINATOR, STATIC ELETRICITY
818	3-609-473-02	s	CAM B, HEAD
819	3-609-474-02	s	CAM F, HEAD
820	3-609-475-01	o	SHAFT, HEAD CAM
821	3-609-476-02	s	PLATE, SENSOR HEAD
822	3-609-480-01	o	PRESSER, HEAD
823	3-609-481-01	s	BEARING, CAM HEAD
824	3-609-483-02	s	HOOK A, LIMITER
825	3-609-484-01	s	HOOK B, LIMITER
826	3-609-485-01	s	LINK, LIMITER
827	3-609-488-01	s	HOLDER, SENSOR HEAD
828	3-609-496-01	s	SPRING, EXTENSION
829	3-609-763-01	s	SPRING, EXTENSION
830	3-611-214-01	s	SPRING, HEAD
831	3-611-226-01	s	SPRING, EXTENSION
832	3-650-537-00	o	WASHER
833	3-686-073-01	o	CLAMP, HARNESS
834	3-703-357-09	s	PIN (DIA. 1.6 SERISE)
835	4-926-219-02	s	RING (DIA.2.3), RETAINING

***NOTE : When replacing the motor of No.802, it is necessory to replace the pulley of No.814.**

8-3. ELECTRICAL PARTS LIST

IF-687/687(3P) BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8316-466-A	o	MOUNTED CIRCUIT BOARD, IF-687(3P) [for UP-D2550]
1pc	A-8316-192-A	o	MOUNTED CIRCUIT BOARD, IF-687 [for UP-D2500]
BZ101	1-529-080-11	s	BUZZER, PIEZOELECTRIC
C101	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C102	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C103	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C104	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C105	1-126-204-11	s	ELECT 47uF 20% 16V
C106	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C107	1-126-204-11	s	ELECT 47uF 20% 16V
C108	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C110	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C111	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C112	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C113	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C114	1-126-204-11	s	ELECT 47uF 20% 16V
C117	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C118	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C119	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C120	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C122	1-163-009-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C123	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C124	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C125	1-126-204-11	s	ELECT 47uF 20% 16V
C126	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C127	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C128	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C201	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C202	1-126-204-11	s	ELECT 47uF 20% 16V
C203	1-126-204-11	s	ELECT 47uF 20% 16V
C204	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C205	1-163-235-11	s	CERAMIC, CHIP 22PF 5% 50V
C206	1-163-235-11	s	CERAMIC, CHIP 22PF 5% 50V
C207	1-163-009-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C208	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C209	1-126-204-11	s	ELECT 47uF 20% 16V
C210	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C211	1-163-009-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C212	1-163-009-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C213	1-163-009-11	s	CERAMIC, CHIP 0.001uF 10% 50V
C214	1-115-339-11	s	CERAMIC 0.1uF 10% 50V
C215	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C216	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C217	1-126-204-11	s	ELECT 47uF 20% 16V
C218	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C219	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C220	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C221	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C222	1-126-204-11	s	ELECT 47uF 20% 16V
C223	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C224	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V

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Ref. No. or Q'ty	Part No.	SP	Description
C225	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C226	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C227	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C228	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C229	1-126-204-11	s	ELECT 47uF 20% 16V
C230	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C231	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C232	1-126-204-11	s	ELECT 47uF 20% 16V
C233	1-126-204-11	s	ELECT 47uF 20% 16V
C234	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C235	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C236	1-126-204-11	s	ELECT 47uF 20% 16V
CN101	1-778-772-11	s	CONNECTOR, FFC/FPC 7P
CN102	1-774-771-11	s	CONNECTOR, FFC/FPC 14P
CN103	1-770-469-21	o	CONNECTOR (PC BOARD) 2P
CN201	1-774-627-11	s	PIN, CONNECTOR (PC BOARD) 36P
CN202	1-774-771-11	s	CONNECTOR, FFC/FPC 14P
CN203	1-779-993-11	s	PIN, CONNECTOR 5P
CN204	1-774-771-11	s	CONNECTOR, FFC/FPC 14P
CNI210	1-526-660-21	o	SOCKET, IC 32P
CNI212	1-526-659-00	o	SOCKET, IC 28P
D201	8-719-801-78	s	DIODE 1SS184
FL201	1-233-316-21	s	FILTER, CHIP EMI
FL202	1-233-316-21	s	FILTER, CHIP EMI
FL203	1-233-316-21	s	FILTER, CHIP EMI
FL204	1-233-316-21	s	FILTER, CHIP EMI
FL205	1-233-316-21	s	FILTER, CHIP EMI
FL206	1-233-316-21	s	FILTER, CHIP EMI
FL207	1-233-316-21	s	FILTER, CHIP EMI
FL208	1-233-316-21	s	FILTER, CHIP EMI
FL209	1-233-316-21	s	FILTER, CHIP EMI
FL210	1-233-316-21	s	FILTER, CHIP EMI
FL211	1-233-316-21	s	FILTER, CHIP EMI
FL212	1-233-316-21	s	FILTER, CHIP EMI
FL213	1-233-316-21	s	FILTER, CHIP EMI
FL214	1-233-316-21	s	FILTER, CHIP EMI
FL215	1-233-316-21	s	FILTER, CHIP EMI
FL216	1-233-316-21	s	FILTER, CHIP EMI
FL217	1-233-316-21	s	FILTER, CHIP EMI
FL218	1-233-316-21	s	FILTER, CHIP EMI
IC101	8-759-194-80	s	IC CXD8869Q
IC102	8-759-461-91	s	IC CXD8677Q
IC105	8-759-479-12	o	IC MX27C4000MC-12-UP28S [for UP-D2550]
IC106	8-759-479-11	o	IC MX27C4000MC-12-UP28M [for UP-D2550]
IC107	8-759-486-81	s	IC HM5117800CJ-6EL
IC108	8-759-486-81	s	IC HM5117800CJ-6EL [for UP-D2550]
IC109	8-759-926-82	s	IC SN74HC574ANS [for UP-D2550]
IC110	8-759-925-90	s	IC SN74HC74ANS [for UP-D2550]
IC111	8-759-927-46	s	IC SN74HC00ANS [for UP-D2550]
IC201	8-759-464-95	s	IC AK6420AF-E2
IC202	8-759-927-29	s	IC SN74HCU04ANS
IC203	8-759-937-56	s	IC S-8054ALB-LM
IC204	8-759-254-94	s	IC HD6413378F10
IC205	8-759-434-21	s	IC SN74ACT1284NS
IC206	8-759-434-21	s	IC SN74ACT1284NS

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Ref. No. or Q'ty	Part No.	SP	Description
IC207	8-759-926-77	s	IC SN74HC541ANS
IC208	8-759-925-76	s	IC SN74HC08NS
IC209	8-759-461-92	s	IC TE6137
IC210	8-759-479-13	o	IC MX27C1000DC-D25SYV1.00
IC211	8-759-926-11	s	IC SN74HC138ANS
L101	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L102	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L103	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L104	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L105	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L106	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L107	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L108	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L201	1-424-653-11	s	COIL, CHOKE 10uH
L202	1-424-653-11	s	COIL, CHOKE 10uH
L203	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L204	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L205	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L206	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L207	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L208	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L209	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L210	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L211	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L212	1-414-235-11	s	INDUCTOR, FERRITE BEAD
L213	1-414-235-11	s	INDUCTOR, FERRITE BEAD
R105	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R106	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R107	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R110	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R111	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R112	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R113	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R114	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R115	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R116	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R117	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R118	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R119	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R120	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R121	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R122	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R123	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R124	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R125	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R126	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R127	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R128	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R129	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R130	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R131	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R132	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R133	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R134	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R135	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R136	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R137	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R138	1-216-017-91	s	METAL, CHIP 47 5% 1/10W

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Ref. No. or Q'ty	Part No.	SP	Description
R139	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R140	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R141	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R142	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R143	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R144	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R145	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R146	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R147	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R148	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R149	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R150	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R151	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R152	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R153	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R154	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R155	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R156	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R157	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R158	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R159	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R160	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R161	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R162	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R163	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R164	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R165	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R166	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R167	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R168	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R169	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R170	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R171	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R172	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R173	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R174	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R175	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R176	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R177	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R178	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R179	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R184	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R185	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R186	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R187	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2500]
R188	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
R189	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
R192	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2550]
R193	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R194	1-216-295-00	s	METAL, CHIP 0 5% 1/10W

(IF-687/687(3P) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R203	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R204	1-216-121-91	s	METAL, CHIP 1M 5% 1/10W
R205	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R206	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R208	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R209	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R211	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R213	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R215	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R217	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R219	1-216-037-00	s	METAL, CHIP 330 5% 1/10W
R220	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R222	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R224	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R226	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R228	1-216-041-00	s	METAL, CHIP 470 5% 1/10W
R229	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R231	1-216-041-00	s	METAL, CHIP 470 5% 1/10W
R232	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R234	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R236	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R238	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R239	1-216-047-91	s	METAL, CHIP 820 5% 1/10W
R240	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R242	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R244	1-216-089-91	s	METAL, CHIP 47K 5% 1/10W
R245	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R246	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R248	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R249	1-216-097-91	s	METAL, CHIP 100K 5% 1/10W
R250	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R251	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R252	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R253	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R254	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R255	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R256	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R257	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R258	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R259	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R260	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R261	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R262	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R263	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R264	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R265	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R266	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R267	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
R268	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R269	1-216-089-91	s	METAL, CHIP 47K 5% 1/10W
R270	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R271	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R272	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R273	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R274	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R275	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R276	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R277	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R278	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R279	1-216-025-00	s	METAL, CHIP 100 5% 1/10W

(IF-687/687(3P) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R280	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R281	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R282	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R283	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R284	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R285	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R286	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R287	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R288	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R289	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R290	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R291	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R292	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R293	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R298	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R299	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R300	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R301	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R309	1-216-295-00	s	METAL, CHIP 0 5% 1/10W [for UP-D2550]
R310	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R312	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R313	1-216-053-00	s	METAL, CHIP 1.5K 5% 1/10W
R314	1-216-053-00	s	METAL, CHIP 1.5K 5% 1/10W
R315	1-216-053-00	s	METAL, CHIP 1.5K 5% 1/10W
R316	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R317	1-216-069-00	s	METAL, CHIP 6.8K 5% 1/10W
R318	1-216-017-91	s	METAL, CHIP 47 5% 1/10W
S201	1-570-909-11	s	SWITCH, PUSH (REFLOW TYPE)
S202	1-570-909-11	s	SWITCH, PUSH (REFLOW TYPE)
S203	1-570-909-11	s	SWITCH, PUSH (REFLOW TYPE)
S204	1-570-909-11	s	SWITCH, PUSH (REFLOW TYPE)
S205	1-570-909-11	s	SWITCH, PUSH (REFLOW TYPE)
S206	1-570-909-11	s	SWITCH, PUSH (REFLOW TYPE)
S207	1-554-088-00	s	SWITCH, TACTILE
X201	1-760-150-21	s	RESONATOR, CERAMIC 20MHz

KY-401(3P)/401(D) BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8316-464-A	o	MOUNTED CIRCUIT BOARD, KY-401 (3P) [for UP-D2550]
1pc	A-8316-188-A	o	MOUNTED CIRCUIT BOARD, KY-401 (D) [for UP-D2500]
CN1	1-770-697-11	s	CONNECTOR, FFC/FPC 14P
S100	1-572-595-11	s	SWITCH, PUSH
S101	1-572-595-11	s	SWITCH, PUSH [for UP-D2550]

KY-422 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8316-356-A	o	MOUNTED CIRCUIT BOARD, KY-422
CN501	1-564-718-11	s	CONNECTOR, 2P, MALE
D501	8-719-041-51	s	DIODE GL1EG111

LE-190 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8316-194-A	o	MOUNTED CIRCUIT BOARD, LE-190
C401	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C402	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
CN401	1-770-690-11	s	CONNECTOR, FFC/FPC 7P
D401	8-719-989-10	s	DIODE SLP-355B-51
D402	8-719-033-19	s	DIODE SLP-655B-51
D403	8-719-033-19	s	DIODE SLP-655B-51
D404	8-719-033-19	s	DIODE SLP-655B-51
Q401	8-729-900-53	s	TRANSISTOR DTC114EK
Q402	8-729-900-53	s	TRANSISTOR DTC114EK
Q403	8-729-900-53	s	TRANSISTOR DTC114EK
Q404	8-729-900-53	s	TRANSISTOR DTC114EK
R402	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R404	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R406	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R408	1-216-033-00	s	METAL, CHIP 220 5% 1/10W

PRT-11(D) BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8316-354-A	o	MOUNTED CIRCUIT BOARD, PRT-11(D)
C101	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C102	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C103	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C104	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C105	1-128-403-11	s	ELECT 47uF 20% 35V
C106	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C107	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C108	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C109	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C110	1-128-403-11	s	ELECT 47uF 20% 35V
C111	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C112	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C113	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C114	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C115	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C116	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C117	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C118	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C119	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C120	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C121	1-164-161-11	s	CERAMIC, CHIP 0.0022uF 10% 100V
C122	1-164-161-11	s	CERAMIC, CHIP 0.0022uF 10% 100V
C123	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C124	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C125	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C126	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C127	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C128	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C129	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C130	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C131	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C132	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C133	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C134	1-128-397-21	s	ELECT 100uF 20% 16V
C135	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C136	1-163-235-11	s	CERAMIC, CHIP 22PF 5% 50V
C137	1-163-235-11	s	CERAMIC, CHIP 22PF 5% 50V
C138	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C139	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C140	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C142	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C143	1-128-397-21	s	ELECT 100uF 20% 16V
C144	1-128-397-21	s	ELECT 100uF 20% 16V
C145	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C146	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C147	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C148	1-128-397-21	s	ELECT 100uF 20% 16V
C149	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C150	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C151	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C152	1-128-397-21	s	ELECT 100uF 20% 16V
C153	1-128-403-11	s	ELECT 47uF 20% 35V
C154	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C155	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C156	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C157	1-128-403-11	s	ELECT 47uF 20% 35V
C158	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V

(PRT-11(D) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C159	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C160	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C161	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C162	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C163	1-128-393-11	s	ELECT 100uF 20% 10V
C164	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C165	1-128-393-11	s	ELECT 100uF 20% 10V
C166	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C167	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C168	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C169	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C170	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C171	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C172	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C173	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C174	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C176	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C177	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C178	1-128-397-21	s	ELECT 100uF 20% 16V
C201	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C202	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C203	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C204	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C205	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C207	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C208	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C209	1-163-251-11	s	CERAMIC, CHIP 100PF 5% 50V
C210	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C211	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C212	1-163-235-11	s	CERAMIC, CHIP 22PF 5% 50V
C213	1-163-235-11	s	CERAMIC, CHIP 22PF 5% 50V
C216	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C217	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C218	1-163-251-11	s	CERAMIC, CHIP 100PF 5% 50V
C219	1-163-251-11	s	CERAMIC, CHIP 100PF 5% 50V
C220	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C221	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C222	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C223	1-128-235-11	s	ELECT, CHIP 0.47uF 20% 50V
C224	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C225	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C226	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C227	1-163-113-00	s	CERAMIC, CHIP 68PF 5% 50V
C228	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C229	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C230	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C231	1-164-161-11	s	CERAMIC, CHIP 0.0022uF 10% 100V
CN1	1-564-729-11	s	PIN, CONNECTOR 13P
CN2	1-564-730-11	o	PIN, CONNECTOR 14P
CN3	1-774-333-11	s	CONNECTOR, FFC/FPC 21P
CN4	1-779-937-11	s	CONNECTOR, FFC/FPC 19P
CN5	1-779-935-11	s	CONNECTOR, FFC/FPC 9P
CN6	1-770-697-11	s	CONNECTOR, FFC/FPC 14P
CN7	1-770-697-11	s	CONNECTOR, FFC/FPC 14P
CN8	1-770-705-11	s	CONNECTOR, FFC/FPC 22P
CN9	1-770-695-11	s	CONNECTOR, FFC/FPC 12P
CN10	1-774-771-11	s	CONNECTOR, FFC/FPC 14P
CN11	1-770-470-21	o	CONNECTOR (PC BOARD) 6P

(PRT-11(D) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
CN12	1-770-160-21	s	PIN, CONNECTOR 2P
CN13	1-770-469-21	o	CONNECTOR (PC BOARD) 2P
CN14	1-770-469-21	o	CONNECTOR (PC BOARD) 2P
CN15	1-573-290-21	s	PIN, CONNECTOR (1.5MM) (SMD)4P
CN16	1-770-160-21	s	PIN, CONNECTOR 2P
CN17	1-770-160-21	s	PIN, CONNECTOR 2P
CN18	1-580-055-21	s	PIN, CONNECTOR 2P
CNI117	1-526-660-21	o	SOCKET, IC 32P
CNI206	1-526-660-21	o	SOCKET, IC 32P
D101	8-719-200-02	s	DIODE 10E-2
D102	8-719-200-02	s	DIODE 10E-2
D104	8-719-200-02	s	DIODE 10E-2
D223	8-719-016-74	s	DIODE 1SS352
IC101	8-759-322-54	s	IC SLA7024M
IC102	8-759-926-49	s	IC SN74HC245ANS
IC103	8-759-926-49	s	IC SN74HC245ANS
IC104	8-759-926-49	s	IC SN74HC245ANS
IC105	8-759-157-19	s	IC MB3863PF-G-BND
IC106	8-759-100-95	s	IC UPC324G2
IC107	8-759-178-20	s	IC M62354FP
IC108	8-759-926-49	s	IC SN74HC245ANS
IC109	8-759-925-76	s	IC SN74HC08NS
IC110	8-759-157-19	s	IC MB3863PF-G-BND
IC111	8-759-926-21	s	IC SN74HC161ANS
IC112	8-759-254-94	s	IC HD6413378F10
IC113	8-759-925-80	s	IC SN74HC14ANS
IC114	8-759-925-90	s	IC SN74HC74ANS
IC115	8-759-148-14	s	IC UPD71055GB-3B4
IC117	8-759-491-63	o	IC MX27C1000-PRT11DGTV1.0
IC118	8-759-983-69	s	IC LM358PS
IC119	8-759-926-11	s	IC SN74HC138ANS
IC201	8-759-925-76	s	IC SN74HC08NS
IC202	8-759-925-85	s	IC SN74HC32ANS
IC204	8-759-926-82	s	IC SN74HC574ANS
IC206	8-759-480-89	o	IC MX27C1000DC-D25G
IC207	8-759-479-07	s	IC CXD8653Q
IC208	8-759-476-50	s	IC CXD8636Q
IC209	8-759-925-72	s	IC SN74HC02ANS
IC210	8-759-189-55	s	IC CXD8865R
L101	1-543-948-11	s	BEAD, FERRITE (CHIP)
L103	1-543-948-11	s	BEAD, FERRITE (CHIP)
L105	1-543-948-11	s	BEAD, FERRITE (CHIP)
L107	1-543-948-11	s	BEAD, FERRITE (CHIP)
L108	1-543-948-11	s	BEAD, FERRITE (CHIP)
L109	1-543-948-11	s	BEAD, FERRITE (CHIP)
L110	1-543-948-11	s	BEAD, FERRITE (CHIP)
L111	1-543-948-11	s	BEAD, FERRITE (CHIP)
L112	1-543-948-11	s	BEAD, FERRITE (CHIP)
L113	1-543-948-11	s	BEAD, FERRITE (CHIP)
L114	1-543-948-11	s	BEAD, FERRITE (CHIP)
L115	1-543-948-11	s	BEAD, FERRITE (CHIP)
L116	1-543-948-11	s	BEAD, FERRITE (CHIP)
L117	1-543-948-11	s	BEAD, FERRITE (CHIP)
L118	1-543-948-11	s	BEAD, FERRITE (CHIP)
L119	1-543-948-11	s	BEAD, FERRITE (CHIP)
L120	1-543-948-11	s	BEAD, FERRITE (CHIP)
L121	1-543-948-11	s	BEAD, FERRITE (CHIP)

(PRT-11(D) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L122	1-543-948-11	s	BEAD, FERRITE (CHIP)
L123	1-543-948-11	s	BEAD, FERRITE (CHIP)
L124	1-543-948-11	s	BEAD, FERRITE (CHIP)
L125	1-543-948-11	s	BEAD, FERRITE (CHIP)
L127	1-543-948-11	s	BEAD, FERRITE (CHIP)
L129	1-543-948-11	s	BEAD, FERRITE (CHIP)
L131	1-543-948-11	s	BEAD, FERRITE (CHIP)
L133	1-424-653-11	s	COIL, CHOKE 10uH
L134	1-424-653-11	s	COIL, CHOKE 10uH
L135	1-424-653-11	s	COIL, CHOKE 10uH
L137	1-408-397-00	s	INDUCTOR 1uH
L141	1-408-397-00	s	INDUCTOR 1uH
L143	1-408-397-00	s	INDUCTOR 1uH
L144	1-408-397-00	s	INDUCTOR 1uH
L145	1-408-397-00	s	INDUCTOR 1uH
L146	1-408-397-00	s	INDUCTOR 1uH
L201	1-543-948-11	s	BEAD, FERRITE (CHIP)
L202	1-543-948-11	s	BEAD, FERRITE (CHIP)
L203	1-543-948-11	s	BEAD, FERRITE (CHIP)
L204	1-543-948-11	s	BEAD, FERRITE (CHIP)
L205	1-543-948-11	s	BEAD, FERRITE (CHIP)
L206	1-543-948-11	s	BEAD, FERRITE (CHIP)
L207	1-543-948-11	s	BEAD, FERRITE (CHIP)
L208	1-543-948-11	s	BEAD, FERRITE (CHIP)
L209	1-543-948-11	s	BEAD, FERRITE (CHIP)
L210	1-543-948-11	s	BEAD, FERRITE (CHIP)
L211	1-543-948-11	s	BEAD, FERRITE (CHIP)
L212	1-543-948-11	s	BEAD, FERRITE (CHIP)
L214	1-543-948-11	s	BEAD, FERRITE (CHIP)
L215	1-543-948-11	s	BEAD, FERRITE (CHIP)
L216	1-424-653-11	s	COIL, CHOKE 10uH
L217	1-424-653-11	s	COIL, CHOKE 10uH
L219	1-543-948-11	s	BEAD, FERRITE (CHIP)
L221	1-543-948-11	s	BEAD, FERRITE (CHIP)
L222	1-543-948-11	s	BEAD, FERRITE (CHIP)
L225	1-543-948-11	s	BEAD, FERRITE (CHIP)
L226	1-543-948-11	s	BEAD, FERRITE (CHIP)
L229	1-543-948-11	s	BEAD, FERRITE (CHIP)
L230	1-543-948-11	s	BEAD, FERRITE (CHIP)
L233	1-543-948-11	s	BEAD, FERRITE (CHIP)
L236	1-543-948-11	s	BEAD, FERRITE (CHIP)
L240	1-543-948-11	s	BEAD, FERRITE (CHIP)
L241	1-408-397-00	s	INDUCTOR 1uH
L242	1-408-397-00	s	INDUCTOR 1uH
L243	1-408-397-00	s	INDUCTOR 1uH
L244	1-408-397-00	s	INDUCTOR 1uH
L245	1-408-397-00	s	INDUCTOR 1uH
Q101	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q102	8-729-140-75	s	TRANSISTOR 2SD999-CLCK
Q103	8-729-101-07	s	TRANSISTOR 2SB798
Q104	8-729-017-80	s	TRANSISTOR 2SD992-Z
Q105	8-729-114-48	s	TRANSISTOR 2SB962-Z-P
Q107	8-729-114-48	s	TRANSISTOR 2SB962-Z-P
Q110	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q111	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
R101	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R102	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R103	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W

(PRT-11(D) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R104	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R105	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R106	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R107	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R108	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R109	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R110	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R111	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R112	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R113	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R114	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R115	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R116	1-216-089-91	s	METAL, CHIP 47K 5% 1/10W
R117	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R118	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R119	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R120	1-216-373-11	s	METAL 2.2 5% 2W
R121	1-216-057-00	s	METAL, CHIP 2.2K 5% 1/10W
R122	1-216-057-00	s	METAL, CHIP 2.2K 5% 1/10W
R123	1-216-373-11	s	METAL 2.2 5% 2W
R124	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R125	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R126	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R127	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R128	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R129	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R130	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R131	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R132	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R133	1-216-089-91	s	METAL, CHIP 47K 5% 1/10W
R134	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R135	1-216-041-00	s	METAL, CHIP 470 5% 1/10W
R136	1-216-023-00	s	METAL, CHIP 82 5% 1/10W
R137	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R138	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R139	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R140	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R141	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R142	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R143	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R144	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R145	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R146	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R147	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R148	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R149	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R150	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R151	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R152	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R153	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R154	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R155	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R156	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R157	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R158	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R159	1-216-037-00	s	METAL, CHIP 330 5% 1/10W
R160	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R161	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R162	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W

(PRT-11(D) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R163	1-215-881-11	s	METAL 15 5% 2W
R165	1-216-309-00	s	METAL 5.6 5% 1/10W
R166	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R167	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R170	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R171	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R172	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R173	1-216-033-00	s	METAL, CHIP 220 5% 1/10W
R174	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R175	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R176	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R178	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R179	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R181	1-216-689-11	s	METAL, CHIP 39K 0.5% 1/10W
R182	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R183	1-216-069-00	s	METAL, CHIP 6.8K 5% 1/10W
R190	1-216-689-11	s	METAL, CHIP 39K 0.5% 1/10W
R191	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R192	1-216-069-00	s	METAL, CHIP 6.8K 5% 1/10W
R196	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R197	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R198	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R201	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R202	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R203	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R204	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R205	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R206	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R207	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R208	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R209	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R210	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R211	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R212	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R213	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R214	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R215	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R216	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R217	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R218	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R219	1-216-121-91	s	METAL, CHIP 1M 5% 1/10W
R220	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R221	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R222	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R223	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R224	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R225	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R226	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R227	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R228	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R229	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R230	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R231	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R232	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R233	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R234	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R235	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R236	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R237	1-216-025-00	s	METAL, CHIP 100 5% 1/10W

(PRT-11(D) BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R238	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R239	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R240	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R241	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
R243	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R244	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R245	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R246	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R247	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R248	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R249	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R250	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R251	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R252	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R253	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R254	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R255	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R256	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R257	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R258	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R259	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R260	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R261	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R262	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R263	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R264	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R265	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R266	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R267	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R268	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R269	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R270	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R271	1-216-097-91	s	METAL, CHIP 100K 5% 1/10W
R272	1-216-009-00	s	METAL, CHIP 22 5% 1/10W
R273	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R274	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R275	1-216-065-00	s	METAL, CHIP 4.7K 5% 1/10W
R276	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R277	1-216-025-00	s	METAL, CHIP 100 5% 1/10W
R278	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R279	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R280	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R281	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R291	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R292	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W
R1000	1-215-881-11	s	METAL 15 5% 2W
S1	1-570-909-11	s	SWITCH, PUSH (REFLOW TYPE)
TH1	1-810-075-11	s	THERMISTOR, NTC
X101	1-579-996-21	s	VIBRATOR, CERAMIC 20.0MHz
X201	1-579-996-21	s	VIBRATOR, CERAMIC 20.0MHz
X202	1-760-590-21	s	OSCILLATOR, CRYSTAL 26.513MHz

SE-417 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8315-872-A	o	MOUNTED CIRCUIT BOARD, SE-417
C1	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C2	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C3	1-163-275-11	s	CERAMIC 0.001uF 5% 50V
C4	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C5	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C6	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C7	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C8	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
C9	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C10	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C11	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C12	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C13	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C14	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C15	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C16	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C17	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C18	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C19	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C20	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C21	1-126-394-11	s	ELECT, CHIP 10uF 20% 16V
C22	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C23	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
CN1	1-580-057-11	s	PIN, CONNECTOR 4P
CN2	1-580-055-21	s	PIN, CONNECTOR 2P
CN3	1-569-775-21	s	PIN, CONNECTOR 5P
CN4	1-580-056-21	o	PIN, CONNECTOR 3P
CN5	1-580-056-21	o	PIN, CONNECTOR 3P
CN6	1-569-775-21	s	PIN, CONNECTOR 5P
CN7	1-770-705-11	s	CONNECTOR, FFC/FPC 22P
IC1	8-759-354-27	s	IC ST24C01FM6TR
IC2	8-759-926-49	s	IC SN74HC245ANS
IC5	8-759-100-95	s	IC UPC324G2
IC6	8-759-100-95	s	IC UPC324G2
IC7	8-759-381-55	s	IC UPC339G2-E2
JR1	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR2	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR3	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR4	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR5	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR6	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR7	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR8	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR9	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR10	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR11	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR12	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR13	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR14	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR15	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR16	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR17	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR18	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR19	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR20	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR21	1-216-295-00	s	METAL, CHIP 0 5% 1/10W

(SE-417 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
JR22	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR23	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR24	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR25	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR26	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR27	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR28	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR29	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR30	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR31	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR32	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR33	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR34	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR35	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR36	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR37	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR38	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR39	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR40	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR41	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR42	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR43	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR44	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR45	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR46	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR47	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR48	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR49	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR50	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR51	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR52	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR53	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR54	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR55	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR56	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR57	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR58	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
PH1	8-749-923-97	s	PHOTO INTERRUPTER GP2S40
Q1	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q2	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q3	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
Q4	8-729-120-28	s	TRANSISTOR 2SC1623-L5L6
R1	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R2	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R3	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R4	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R5	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R6	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R7	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R8	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R9	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R10	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R11	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R12	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R13	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R14	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R15	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W

(SE-417 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R16	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R17	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R18	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R19	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R20	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R21	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R22	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R23	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R24	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R25	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R26	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R27	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R28	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R29	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R30	1-216-105-91	s	METAL, CHIP 220K 5% 1/10W
R31	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R32	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R33	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R34	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R35	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R36	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R37	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R38	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R39	1-216-081-00	s	METAL, CHIP 22K 5% 1/10W
R40	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R41	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R42	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R43	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R44	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R45	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R46	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R47	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R48	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R49	1-216-295-00	s	METAL, CHIP 0 5% 1/10W

SE-418 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8315-874-A	o	MOUNTED CIRCUIT BOARD, SE-418
C101	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C102	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C103	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C104	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C105	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C106	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C107	1-163-133-00	s	CERAMIC, CHIP 470PF 5% 50V
C108	1-104-608-11	s	ELECT, CHIP 33uF 20% 6.3V
C109	1-163-038-91	s	CERAMIC, CHIP 0.1uF 25V
CN101	1-691-550-11	s	CONNECTOR (1.5MM)(SMD) 3P MALE
CN102	1-691-550-11	s	CONNECTOR (1.5MM)(SMD) 3P MALE
CN103	1-573-768-21	s	CONNECTOR (1.5MM)(SMD) 5P MALE
CN104	1-573-768-21	s	CONNECTOR (1.5MM)(SMD) 5P MALE
CN105	1-778-276-11	s	CONNECTOR, FFC/FPC 12P
IC101	8-759-926-49	s	IC SN74HC245ANS
JR101	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR102	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR103	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR104	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR105	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR106	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR107	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR108	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
JR109	1-216-295-00	s	METAL, CHIP 0 5% 1/10W
PH101	8-749-010-69	s	PHOTO INTERUPTER GP158V
Q101	8-729-101-07	s	TRANSISTOR 2SB798
Q102	8-729-901-00	s	TRANSISTOR DTC124EK
R101	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R102	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R103	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R104	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R105	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R106	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R107	1-216-029-00	s	METAL, CHIP 150 5% 1/10W
R108	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R109	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R110	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R111	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R112	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R113	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R114	1-216-013-00	s	METAL, CHIP 33 5% 1/10W
R115	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R116	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R117	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R118	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R119	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R120	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R121	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R122	1-216-073-00	s	METAL, CHIP 10K 5% 1/10W
R123	1-216-049-00	s	METAL, CHIP 1K 5% 1/10W

SE-419 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-667-005-11	o	PRINTED CIRCUIT BOARD, SE-419
CN150	1-573-290-21	s	PIN, CONNECTOR (1.5MM) (SMD)4P
PH150	8-719-052-69	s	DIODE RPI-352
S150	1-571-958-11	s	SWITCH, PUSH (1 KEY)

SE-420 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-667-006-11	o	PRINTED CIRCUIT BOARD, SE-420
CN201	1-573-768-21	s	CONNECTOR (1.5MM)(SMD) 5P MALE
PH201	8-719-052-69	s	DIODE RPI-352
PH202	8-719-052-69	s	DIODE RPI-352

SE-422 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-667-007-11	o	PRINTED CIRCUIT BOARD, SE-422
CN250	1-580-056-21	o	PIN, CONNECTOR 3P
PH250	8-749-923-97	s	PHOTO INTERRUPTER GP2S40

SE-423 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-983-11	o	PRINTED CIRCUIT BOARD, SE-423
CN301	1-580-056-21	o	PIN, CONNECTOR 3P
D301	8-719-938-07	s	DIODE GL480
D302	8-719-938-07	s	DIODE GL480

SE-424 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-984-11	o	PRINTED CIRCUIT BOARD, SE-424
CN350	1-580-056-21	o	PIN, CONNECTOR 3P
Q350	8-729-930-95	s	PHOTO TRANSISTOR PT480F
Q351	8-729-930-95	s	PHOTO TRANSISTOR PT480F

SE-425 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-985-11	o	PRINTED CIRCUIT BOARD, SE-425
CN401	1-580-056-21	o	PIN, CONNECTOR 3P
CN402	1-569-775-21	s	PIN, CONNECTOR 5P
PH401	8-749-923-97	s	PHOTO INTERRUPTER GP2S40

SE-426 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-986-11	o	PRINTED CIRCUIT BOARD, SE-426
CN450	1-564-707-11	o	CONNECTOR, 5P, MALE
PH450	8-749-010-50	s	PHOTO INTERUPTER RPI-5100
PH451	8-719-052-69	s	DIODE RPI-352

SE-427 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-987-11	o	PRINTED CIRCUIT BOARD, SE-427
CN501	1-691-550-11	s	CONNECTOR (1.5MM)(SMD) 3P MALE
PH501	8-749-010-50	s	PHOTO INTERUPTER RPI-5100

SE-428 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-988-11	o	PRINTED CIRCUIT BOARD, SE-428
CN550	1-580-056-21	o	PIN, CONNECTOR 3P
PH550	8-719-939-05	s	PHOTOINTERRUPTER GP-1S54

SE-429 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-997-11	o	PRINTED CIRCUIT BOARD, SE-429
CN601	1-569-775-21	s	PIN, CONNECTOR 5P
PH601	8-719-052-69	s	DIODE RPI-352
PH602	8-719-052-69	s	DIODE RPI-352

SE-430 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-998-11	o	PRINTED CIRCUIT BOARD, SE-430
CN650	1-580-057-11	s	PIN, CONNECTOR 4P
CN651	1-778-273-11	s	CONNECTOR, 15P FEMALE

SU-36 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-666-999-11	o	PRINTED CIRCUIT BOARD, SU-36
CN750	1-770-160-21	s	PIN, CONNECTOR 2P
M750	1-541-309-11	s	MOTOR, L (RF-370C)

SU-37 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-667-000-11	o	PRINTED CIRCUIT BOARD, SU-37
CN801	1-770-160-21	s	PIN, CONNECTOR 2P
M801	1-541-309-11	s	MOTOR, L (RF-370C)

SU-38 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-667-001-11	o	PRINTED CIRCUIT BOARD, SU-38
CN850	1-770-160-21	s	PIN, CONNECTOR 2P
M850	1-541-309-11	s	MOTOR, L (RF-370C)

SU-39 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-667-002-11	o	PRINTED CIRCUIT BOARD, SU-39
CN901	1-564-718-11	s	CONNECTOR, 2P, MALE
M901	1-698-323-11	s	MOTOR, DC

FRAME

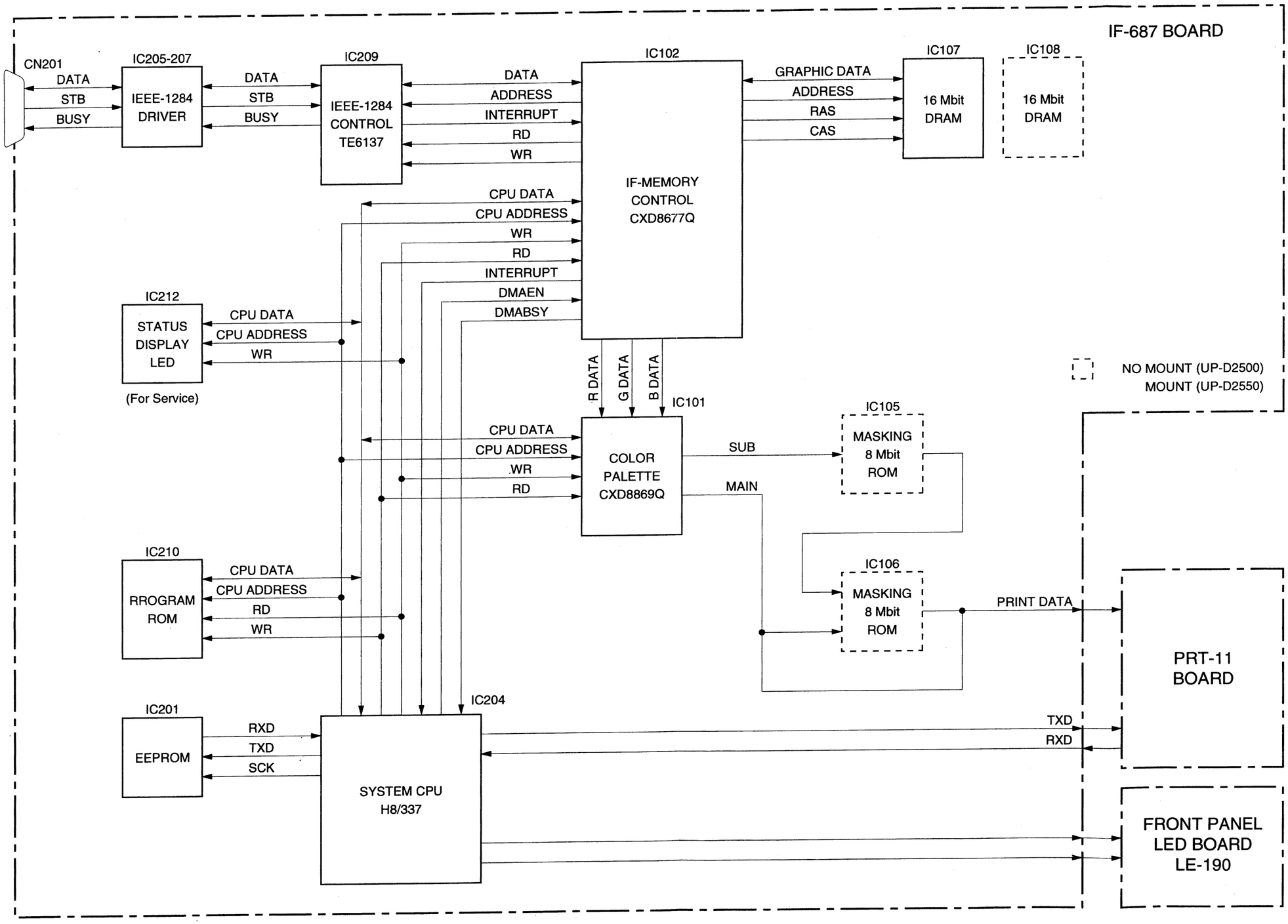
Ref. No. or Q'ty	Part No.	SP	Description
1pc	⚠ 1-468-250-13	s	SWITCHIN REGULATOR
	⚠ 1-576-232-41	s	FUSE 5A 250V [for SWITCHING REGULATOR]
1pc	1-500-474-11	s	HEAD, THERMAL (LV6103)
2pcs	1-541-684-51	s	MOTOR, DC
1pc	1-692-960-11	s	SWITCH, PUSH (1 KEY)
1pc	1-698-555-21	s	MOTOR, STEPPING(PM42S-048-SNA6)
1pc	1-763-007-11	s	FAN, DC
1pc	1-782-729-11	s	WIRE, FLAT (7-CORE)[for J,UC]
1pc	1-782-906-11	s	WIRE, FLAT (WITH SHIELD)(7-CORE) [for CE]
1pc	1-782-730-11	s	WIRE, FLAT (14-CORE)
1pc	1-782-734-11	s	WIRE, FLAT (14-CORE)
1pc	1-782-735-11	s	WIRE, FLAT (22-CORE)
1pc	1-782-736-11	s	WIRE, FLAT (12-CORE)
1pc	1-782-738-11	s	WIRE, FLAT (21-CORE)
1pc	1-782-739-11	s	WIRE, FLAT (19-CORE)
TO CN001/PRT-11			
1pc	1-562-655-11	o	SOCKET, CONNECTOR 13P
1pc	1-562-643-11	o	CONTACT, FEMALE
TO CN002/SWITCHING REGULATOR			
1pc	1-562-655-11	o	SOCKET, CONNECTOR 13P
1pc	1-562-643-11	o	CONTACT, FEMALE
TO CN004/SWITCHING REGULATOR			
1pc	1-562-647-11	o	SOCKET, CONNECTOR 5P
1pc	1-562-643-11	o	CONTACT, FEMALE
TO CN103/IF-687			
1pc	1-562-644-11	s	SOCKET, CONNECTOR 2P
1pc	1-562-643-11	o	CONTACT, FEMALE
TO CN203/IF-687			
1pc	1-562-647-11	o	SOCKET, CONNECTOR 5P
1pc	1-562-643-11	o	CONTACT, FEMALE
TO CN501/KY-422			
1pc	1-562-644-11	s	SOCKET, CONNECTOR 2P
1pc	1-562-643-11	o	CONTACT, FEMALE

SUPPLIED ACCESSORIES

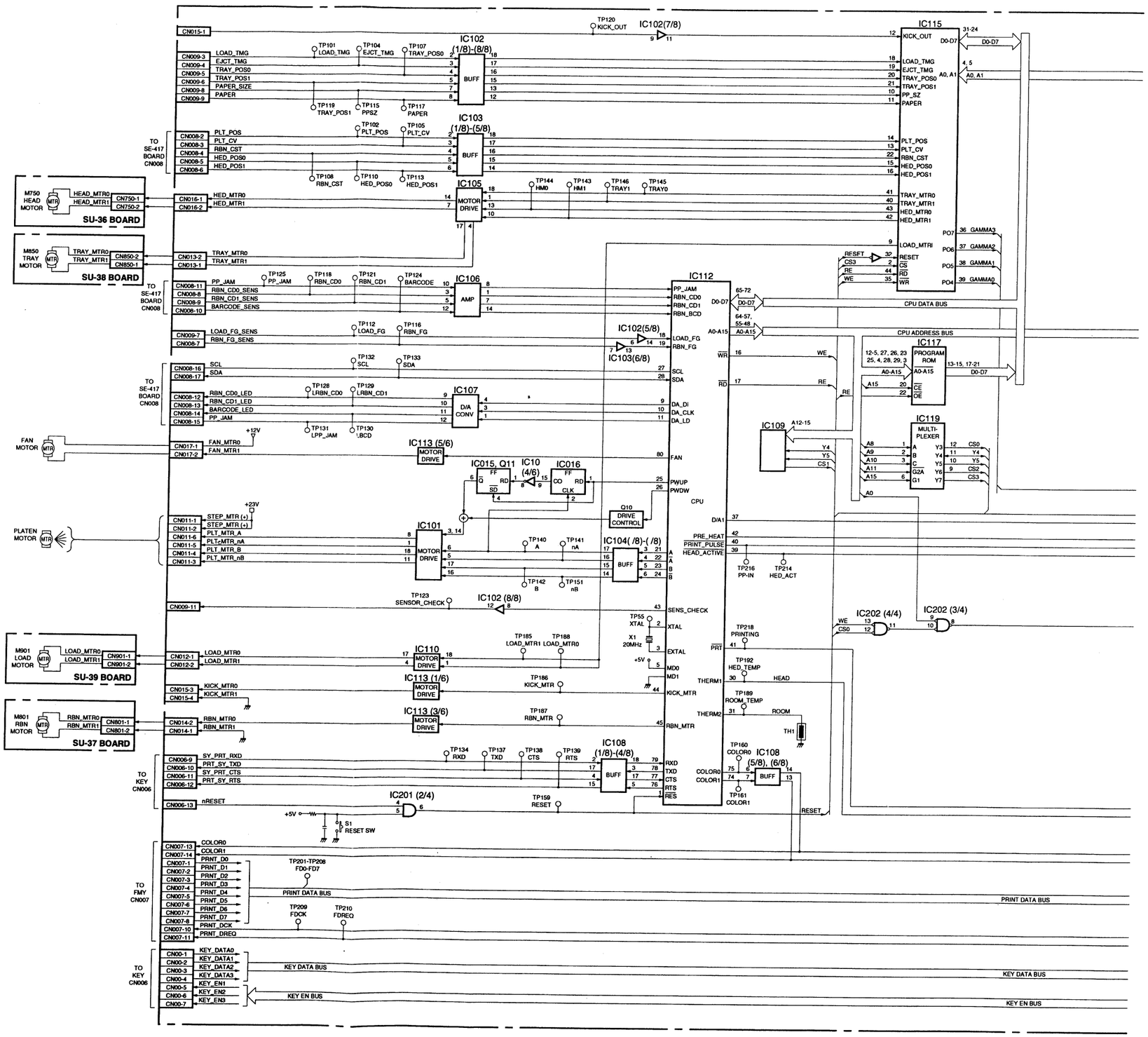
Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-8278-738-A	s	STD, TRAY ASSY
1pc	⚠ 1-534-827-14	s	CORD, POWER[for UC]
1pc	⚠ 1-551-631-22	s	CORD, POWER[for CE]
1pc	⚠ 1-575-181-11	s	CORD, POWER[for J]
1pc	⚠ 1-750-686-11	s	CONNECTOR, CONVERSION (3P-2P) [for J]
1pc	3-609-528-01	o	TRAY, PAPER EJECT
1pc	3-860-609-01	s	MANUAL, INSTRUCTION[for J]
1pc	3-860-609-11	s	MANUAL, INSTRUCTION[for UC]
1pc	3-860-609-21	s	MANUAL, INSTRUCTION[for CE]

SECTION 9
BLOCK DIAGRAM

OVERALL

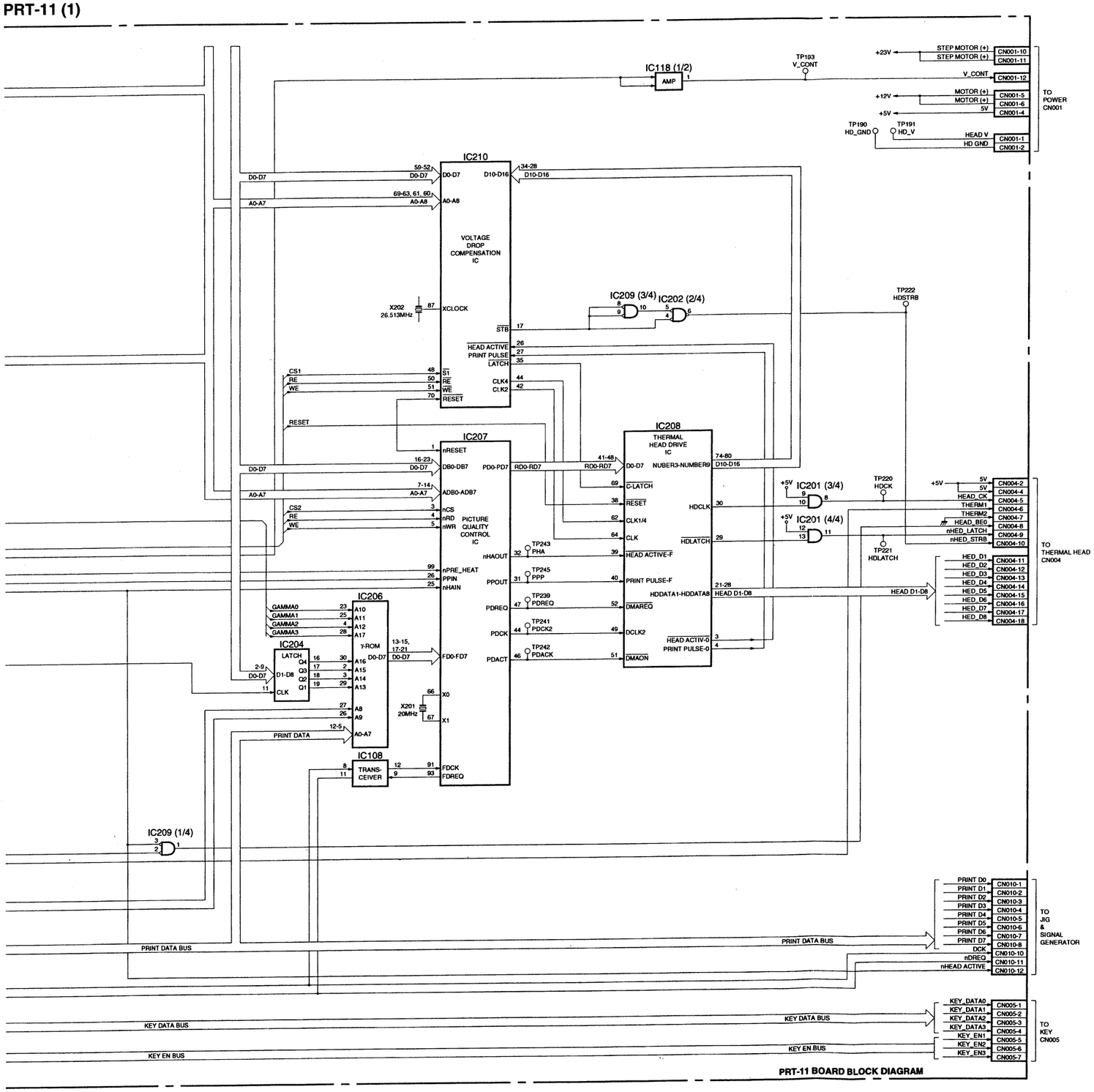


PRT-11 (1)


IC115
IC102 (1/8)-(8/8)
IC103 (1/8)-(5/8)
IC105
IC106
IC112
IC107
IC113 (5/6)
IC015, Q11
IC10 (4/6)
IC016
IC101
IC104(/8)-(/8)
IC102 (8/8)
IC110
IC113 (1/6)
IC113 (3/6)
IC108 (1/8)-(4/8)
IC108 (5/8), (6/8)
IC102(7/8)
IC102(5/8)
IC103(6/8)
IC117
IC119
IC109
IC201 (2/4)
IC202 (4/4)
IC202 (3/4)
M750 HEAD MOTOR
SU-36 BOARD
M850 TRAY MOTOR
SU-38 BOARD
FAN MOTOR
PLATEN MOTOR
M901 LOAD MOTOR
SU-39 BOARD
M801 RBN MOTOR
SU-37 BOARD
TO SE-417 BOARD CN008
TO KEY CN006
TO FMY CN007
CPU DATA BUS
CPU ADDRESS BUS
PRINT DATA BUS
KEY DATA BUS
KEY EN BUS
S1 RESET SW

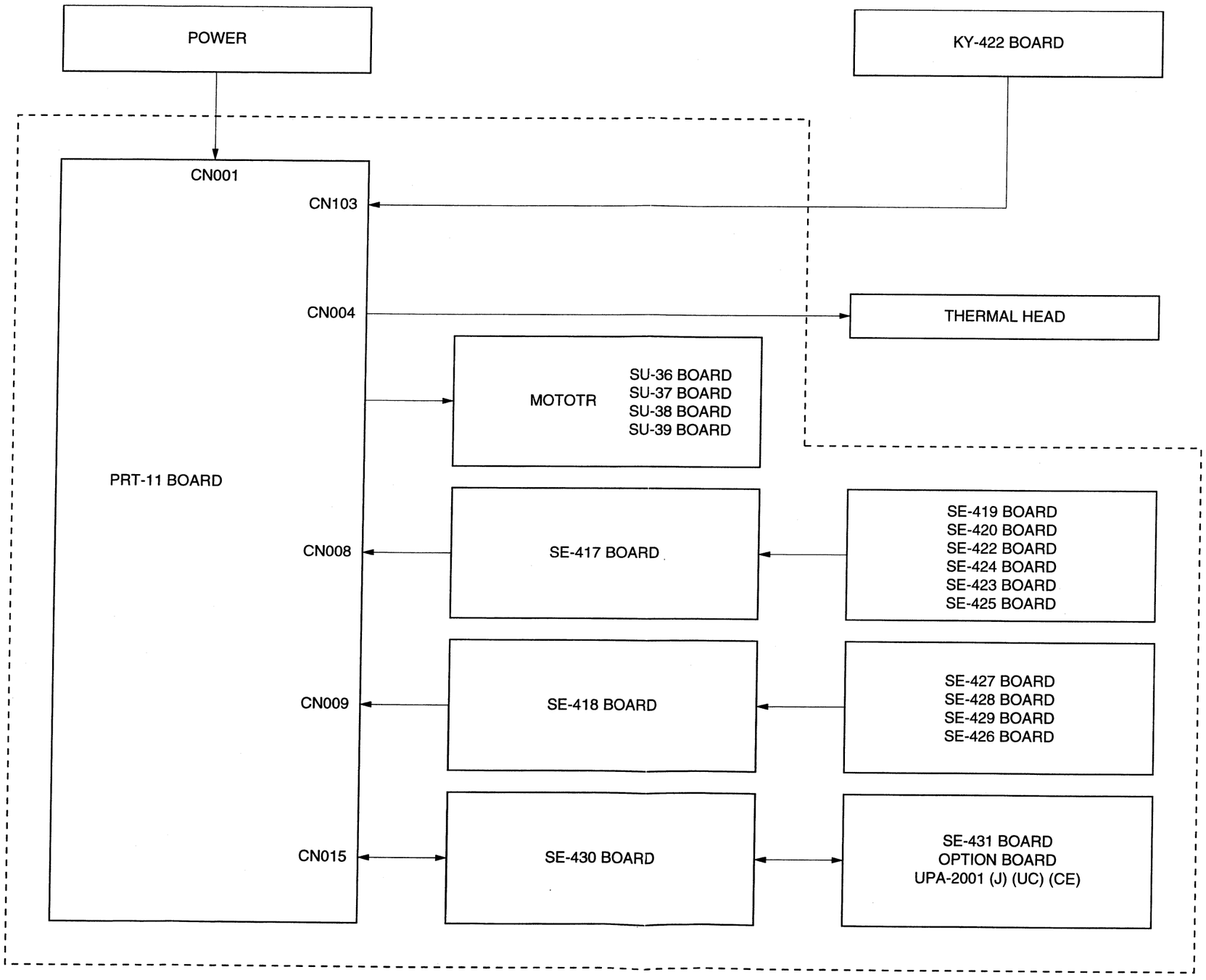
9-2

PRT-11 (1)



PRT-11 BOARD BLOCK DIAGRAM

PRT-11 (2)


POWER
KY-422 BOARD
CN001
CN103
CN004
THERMAL HEAD
MOTOTR
SU-36 BOARD
SU-37 BOARD
SU-38 BOARD
SU-39 BOARD
PRT-11 BOARD
CN008
SE-417 BOARD
SE-419 BOARD
SE-420 BOARD
SE-422 BOARD
SE-424 BOARD
SE-423 BOARD
SE-425 BOARD
CN009
SE-418 BOARD
SE-427 BOARD
SE-428 BOARD
SE-429 BOARD
SE-426 BOARD
CN015
SE-430 BOARD
SE-431 BOARD
OPTION BOARD
UPA-2001 (J) (UC) (CE)

SECTION 10
PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

プリント図, 回路図共通ノート
(他に必要なノートは各ブロックに記載してあります。)

【回路図ノート】

・チップ交換時の注意
取り外した部品は再使用せず, 未使用の部品をご使用ください。
タンタルコンデンサのマイナス側は熱に弱いため, 注意してください。
・抵抗で指示のないものは1/4 W。(チップ抵抗は1/10 W。)
単位はすべてΩ。
kΩ：1000 Ω, MΩ：1000 kΩ
・ケミコン, タンタルを除くコンデンサで, 耐圧50 V以下のものは, その耐圧を省略。単位はすべてμF。(PはpF。)
・可変抵抗と半固定抵抗で, B特性の表示を省略。
・ ― は不燃性抵抗。
・ ― はヒューズ抵抗。
・ □ は調整名称。

⚠印の部品は, 安全性を維持するために, 重要な部品です。従って交換時は, 必ず指定の部品を使用して下さい。

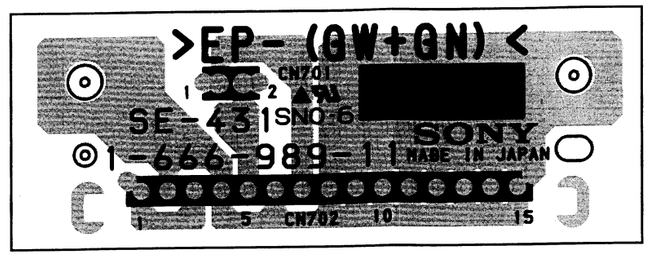
お願い
図面番号で部品を指定するときは基板名又はブロックを併せて指定して下さい。

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

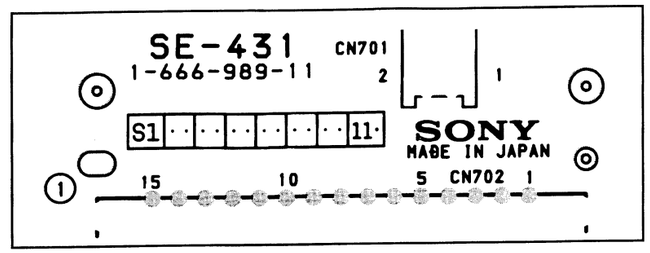
- **For Schematic Diagrams.**
- Caution when replacing chip parts.
New parts must be attached after removal of chip.
Be careful not to heat the minus side of tantalum capacitor, because it is damaged by the heat.
- All resistors are in ohms, 1/10W unless otherwise noted.
kΩ: 1000Ω, MΩ: 1000kΩ.
- All capacitors are in μF unless otherwise noted.
pF: μμF.
50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- ― : nonflammable resistor.
- ― : fusibe resistor.

Note: The components identified by mark ⚠ are critical for safety. Replace only with part number specified.

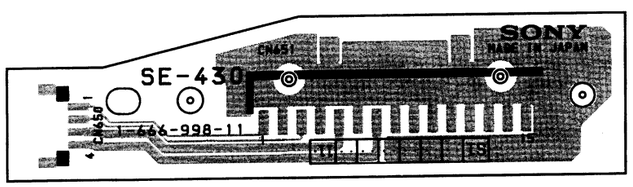
Note: Les composants identifiés par une marque ⚠ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.



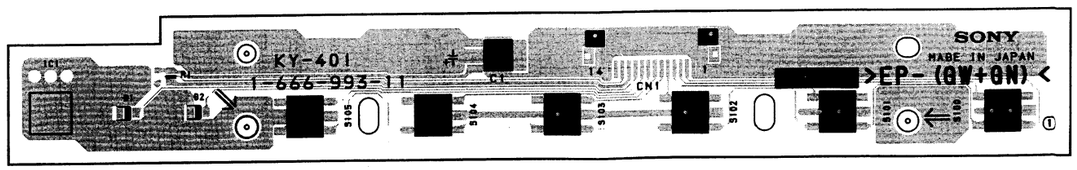
SE-431 A SIDE
1-666-989-11



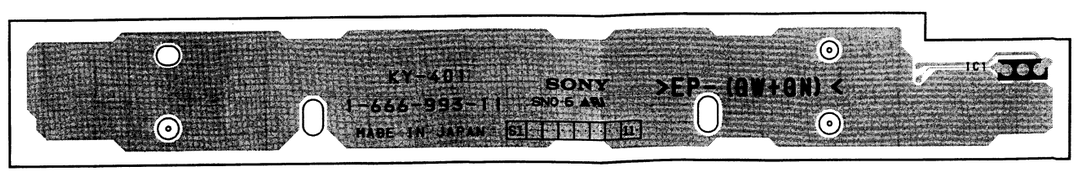
SE-431 B SIDE
1-666-989-11



SE-430 A SIDE
1-666-998-11



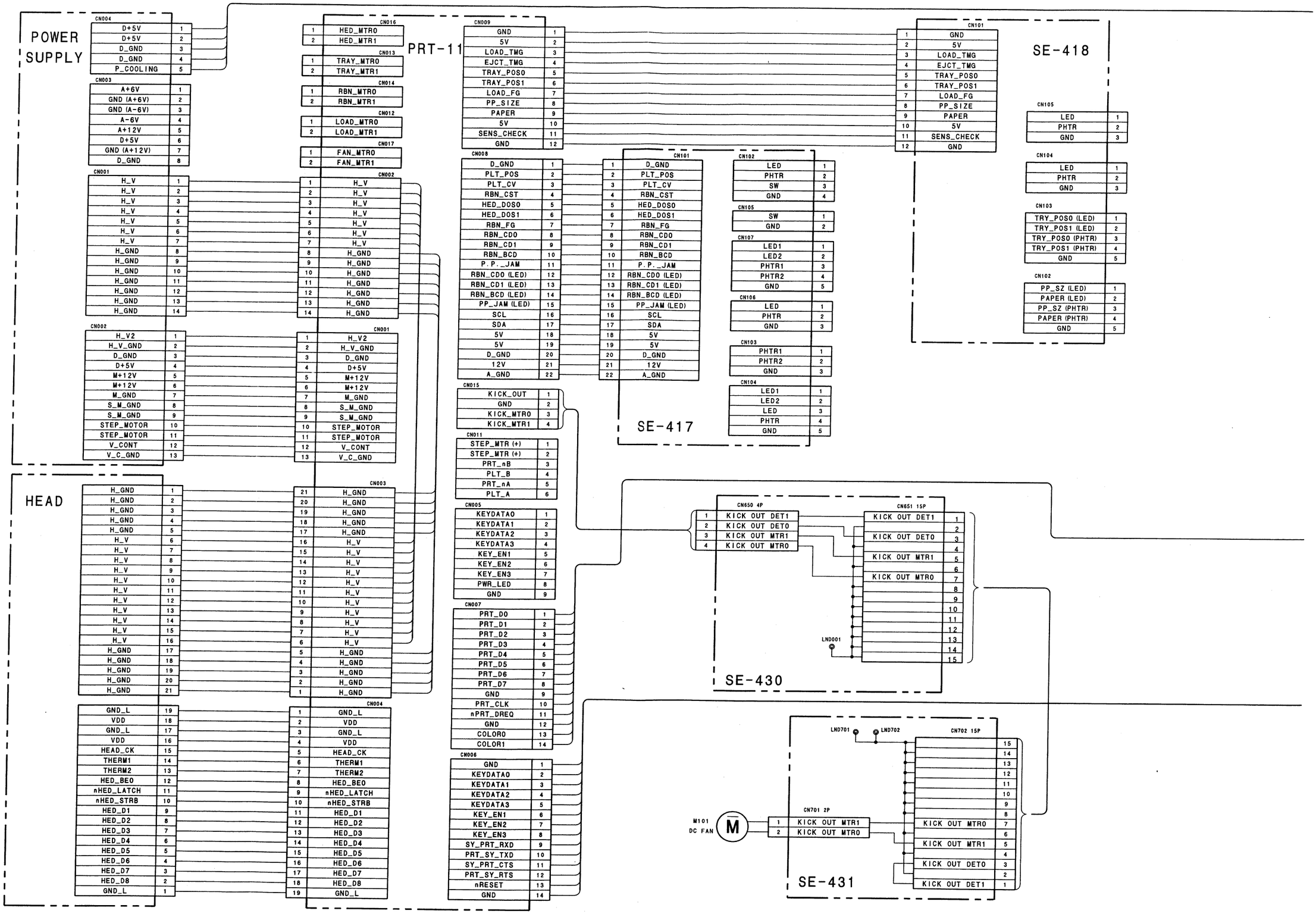
KY-401 A SIDE
1-666-993-11



KY-401 B SIDE
1-666-993-11

UP-D2550(J)
UP-D2500(UC,CE)

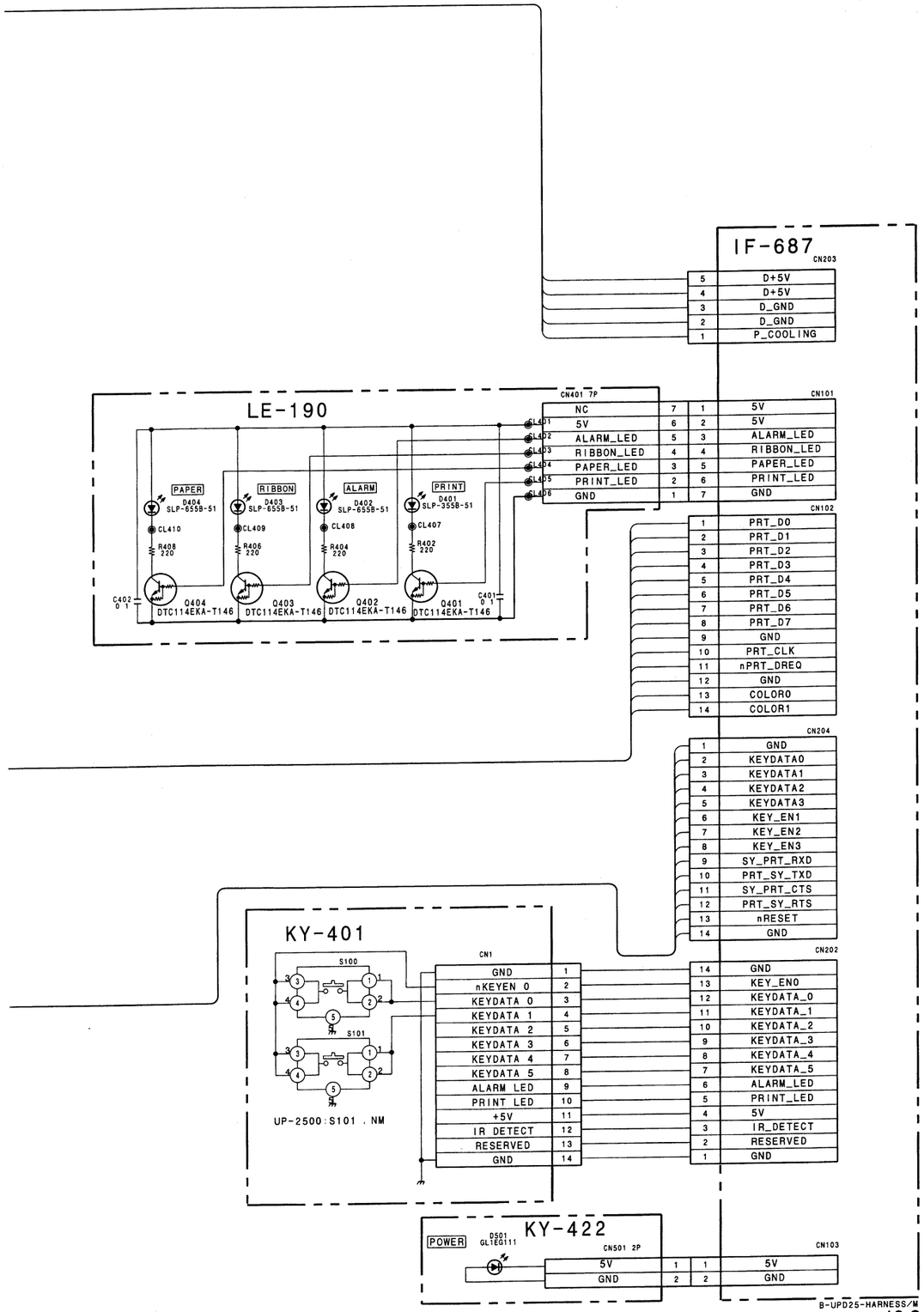
CN-1520, KY-422, LE-190, HARNESS



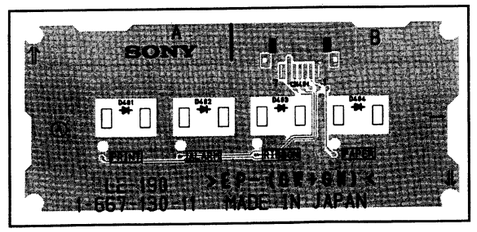
10-2

10-2

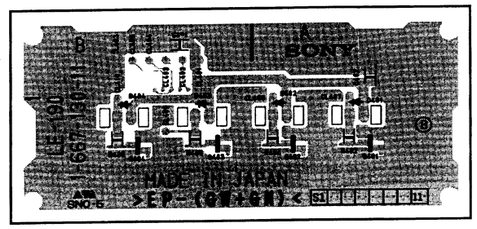
CN-1520, KY-422, LE-190, HARNESS



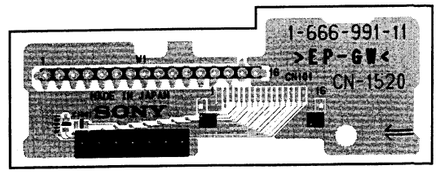
UP-D2550(J)
UP-D2500(UC,CE)



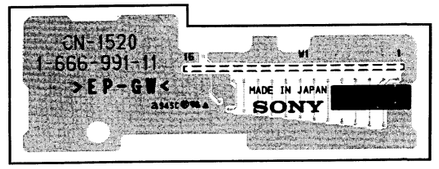
LE-190 A SIDE
1-667-130-11



LE-190 B SIDE
1-667-130-11



CN-1520 A SIDE
1-666-991-11



CN-1520 B SIDE
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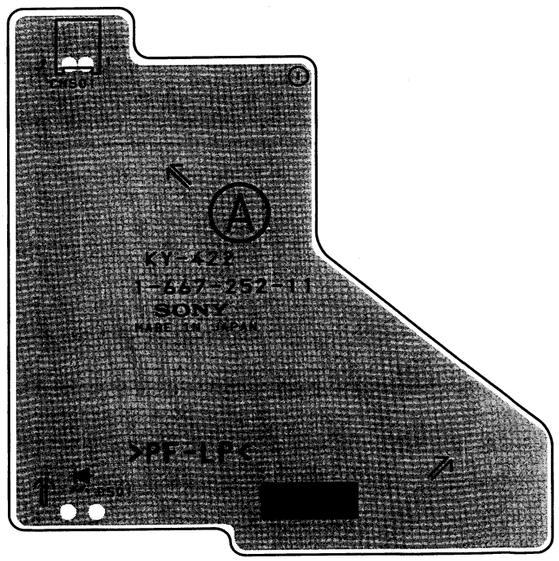
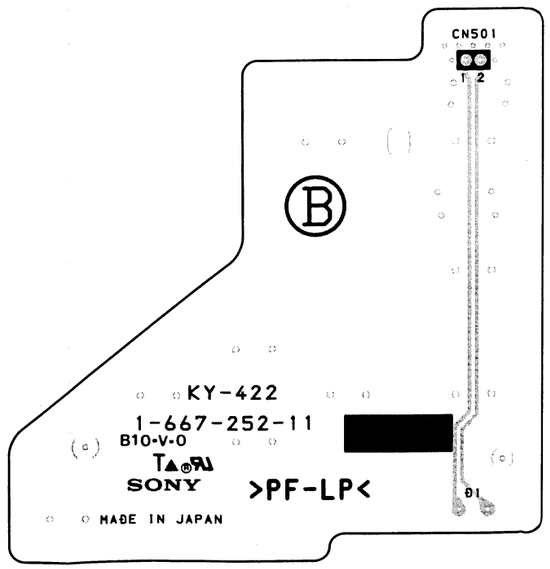
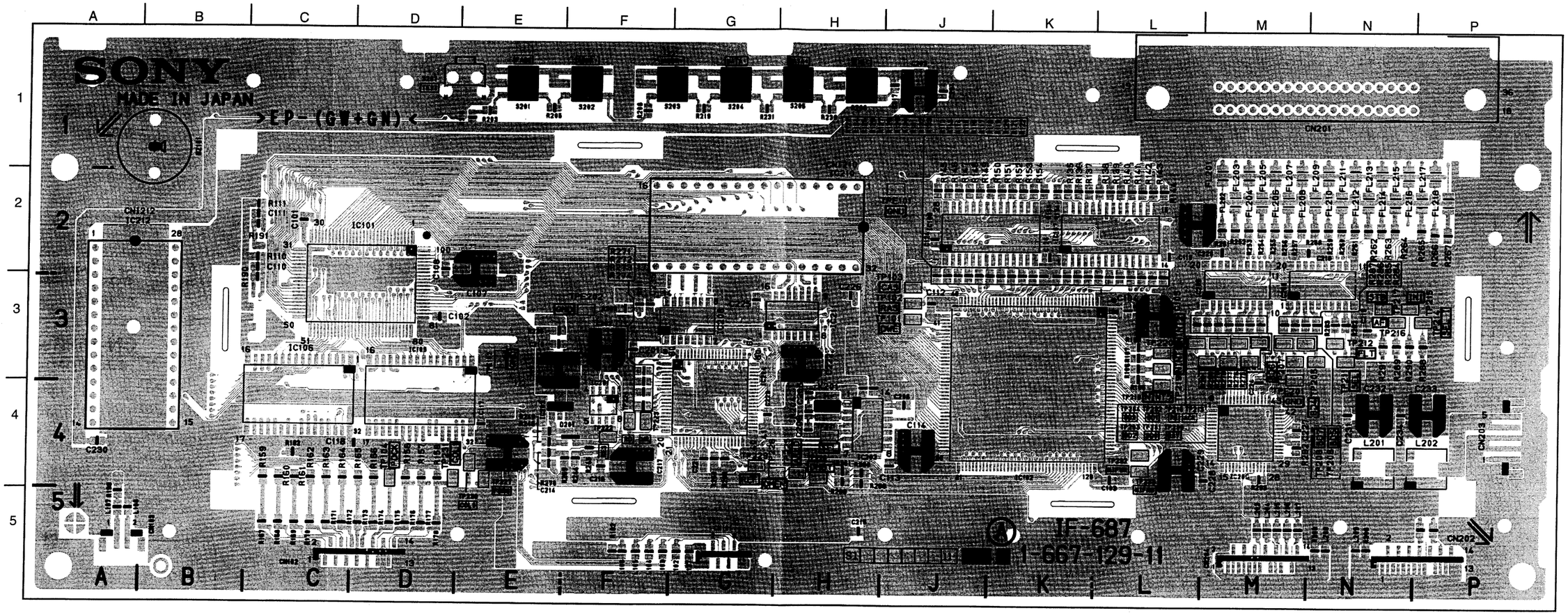


KY-422 A SIDE
1-667-252-11



KY-422 B SIDE
1-667-252-11



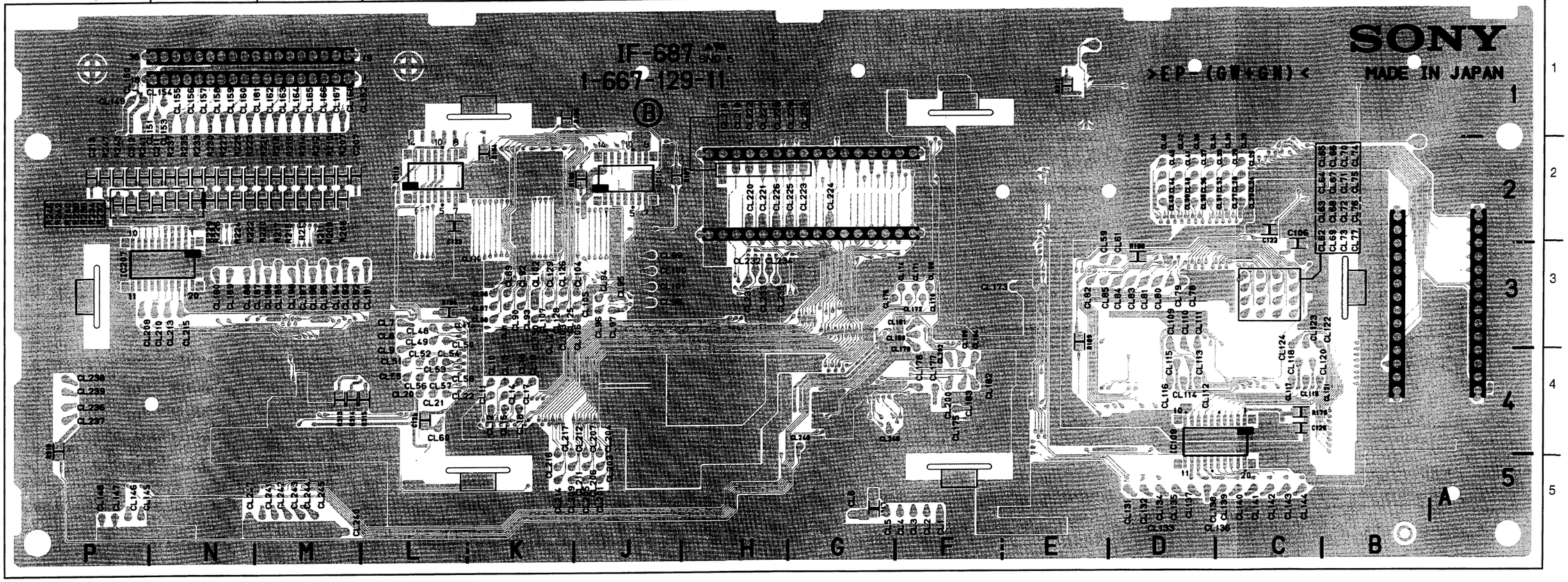
IF-687 A SIDE
1-667-129-11

IF-687

BZ101	B-1	IC201	F-4
		IC202	H-4
CN101	G-5	IC203	E-4
CN102	C-5	IC204	G-3
CN103	B-5	IC205	M-3
CN201	N-1	IC206	M-3
CN202	P-5	*IC207	P-3
CN203	P-4	IC208	G-3
CN204	M-5	IC209	M-4
CNI210	H-2	IC210	H-2
CNI212	A-2	IC211	H-3
		IC212	A-2
D201	F-4		
		S201	E-1
IC101	D-2	S202	F-1
IC102	K-4	S203	F-1
IC105	D-3	S204	G-1
IC106	C-3	S205	H-1
IC107	K-2	S206	H-1
IC108	J-2	S207	D-1
*IC109	D-4		
*IC110	L-2	X201	H-4
*IC111	J-2		

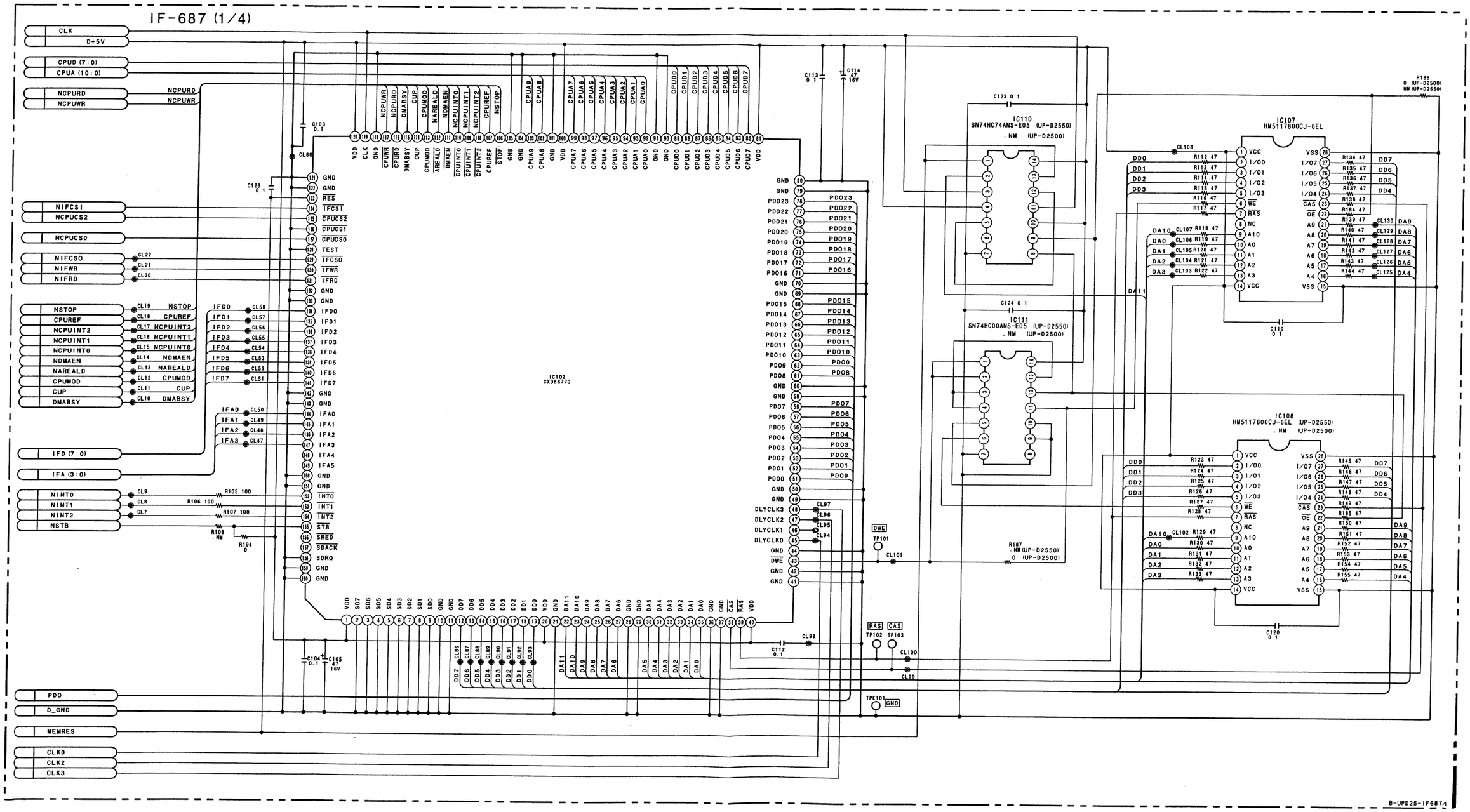
*:B SIDE

UP-D2550(J)
UP-D2500(UC,CE)

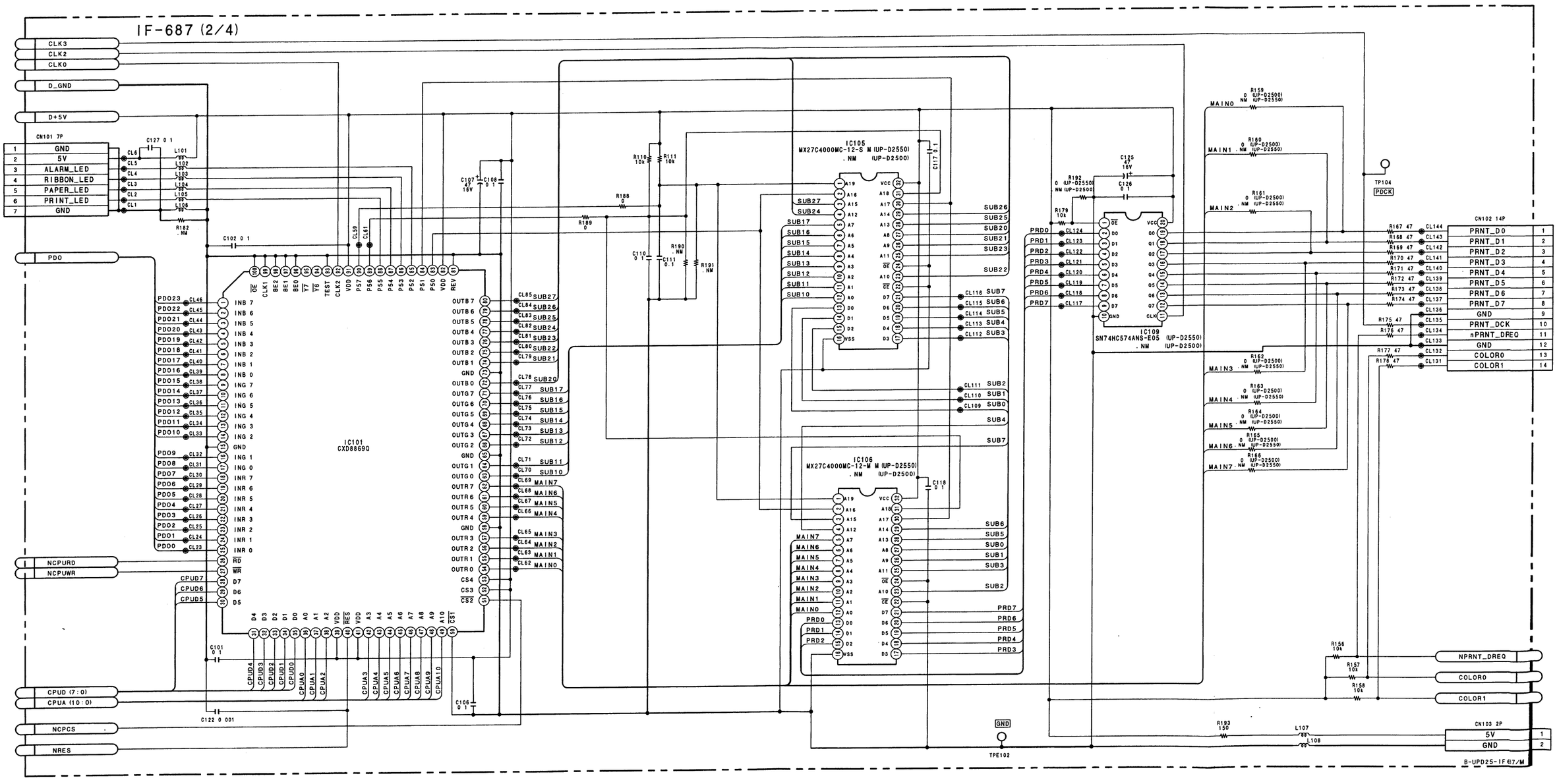


IF-687 B SIDE
1-667-129-11

DIGITAL VIDEO

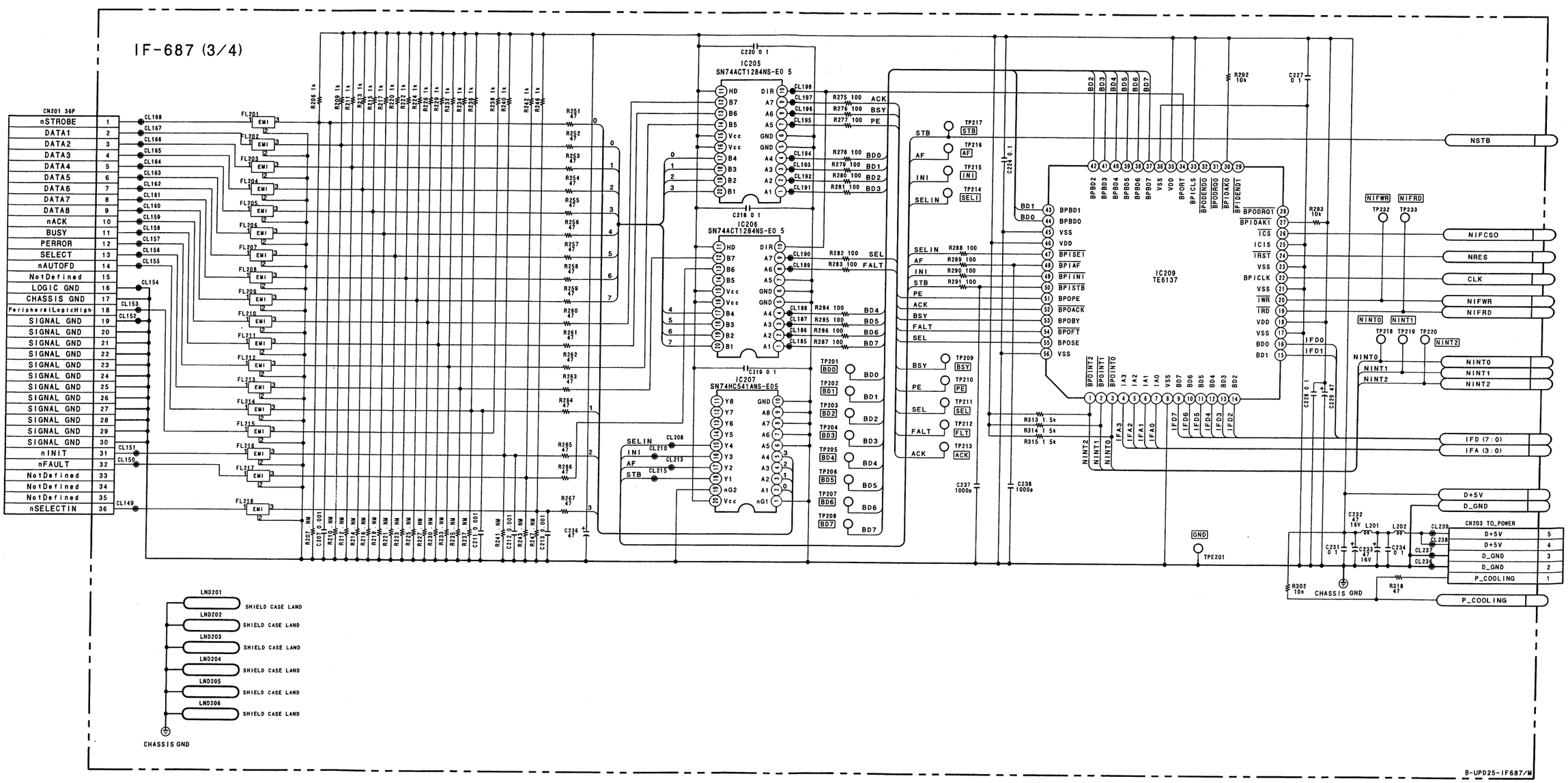


IF-687 (2/4)

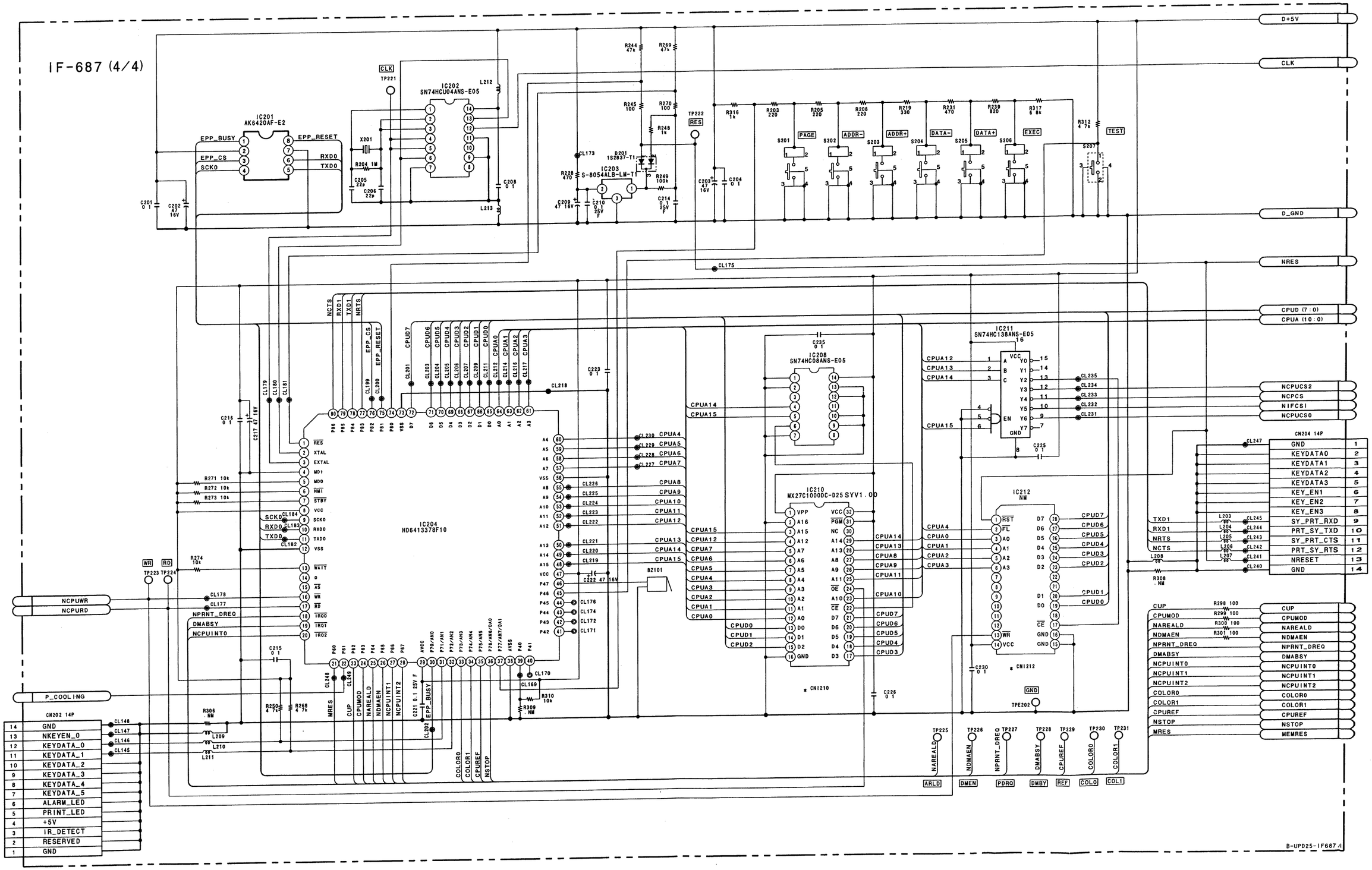


UP-D2550(J)
UP-D2500(UC,CE)

10-7 10-7


IF-687 (3/4)
CN201 36P
nSTROBE 1
DATA1 2
DATA2 3
DATA3 4
DATA4 5
DATA5 6
DATA6 7
DATA7 8
DATA8 9
nACK 10
BUSY 11
PERROR 12
SELECT 13
nAUTOFD 14
NotDefined 15
LOGIC GND 16
CHASSIS GND 17
PeripheralLogicHigh 18
SIGNAL GND 19
SIGNAL GND 20
SIGNAL GND 21
SIGNAL GND 22
SIGNAL GND 23
SIGNAL GND 24
SIGNAL GND 25
SIGNAL GND 26
SIGNAL GND 27
SIGNAL GND 28
SIGNAL GND 29
SIGNAL GND 30
nINIT 31
nFAULT 32
NotDefined 33
NotDefined 34
NotDefined 35
nSELECTIN 36
IC205 SN74ACT1284NS-E0 5
IC206 SN74ACT1284NS-E0 5
IC207 SN74HC541ANS-E05
IC209 TE6137
ACK
BSY
PE
SEL
FALT
STB
AF
INI
SELIN
NSTB
NIFCSO
NRES
CLK
NIFWR
NIFRD
NINT0
NINT1
NINT2
IFD (7:0)
IFA (3:0)
D+5V
D_GND
P_COOLING
CN203 TO_POWER
LND201 SHIELD CASE LAND
LND202 SHIELD CASE LAND
LND203 SHIELD CASE LAND
LND204 SHIELD CASE LAND
LND205 SHIELD CASE LAND
LND206 SHIELD CASE LAND
CHASSIS GND
B-UPD25-IF687/M

IF-687 (4/4)

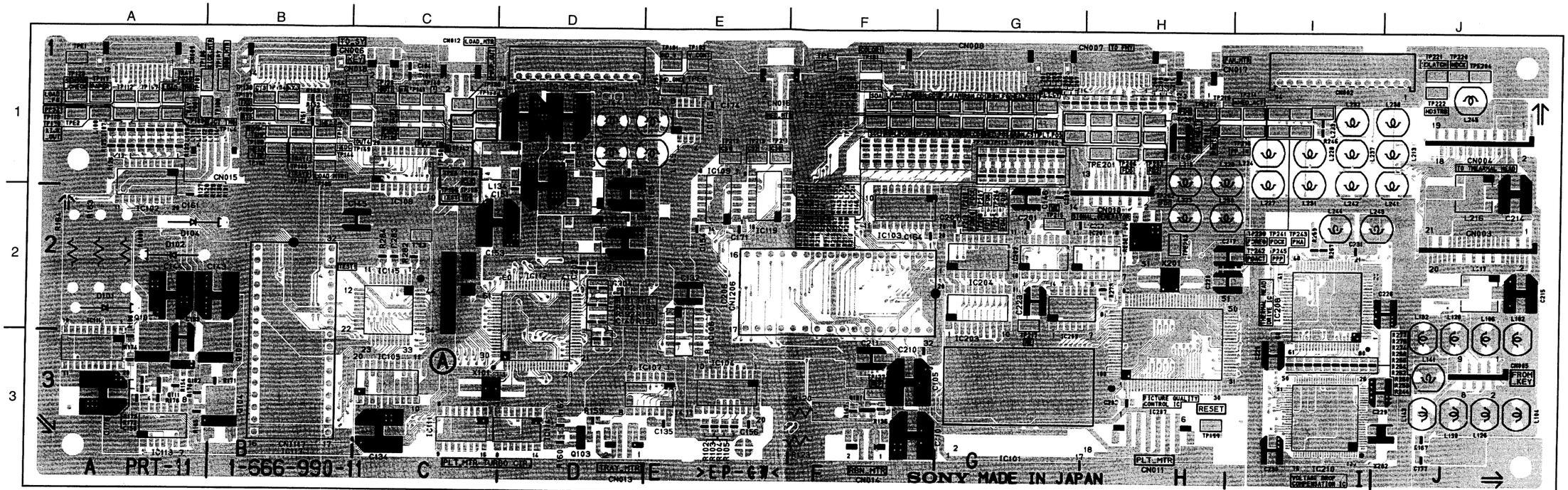


B-UPD25-IF687

UP-D2550(J)
UP-D2500(UC,CE)

10-9 10-9

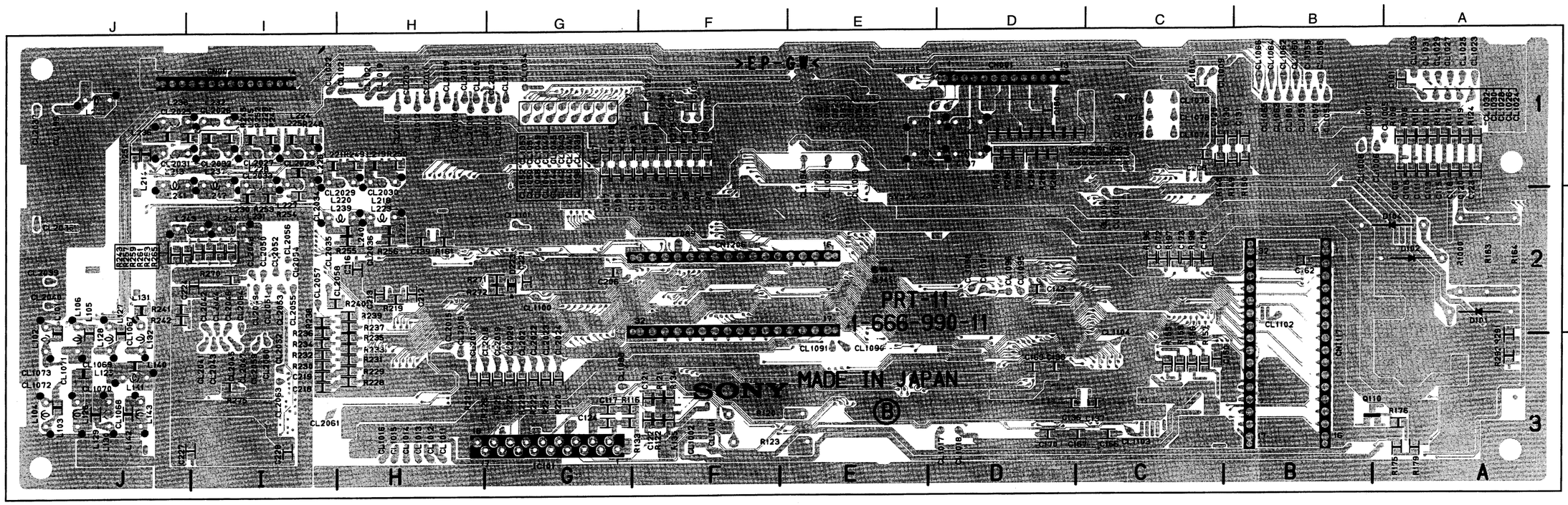
SONY-SP0552 / DRUCK 13



PRT-11

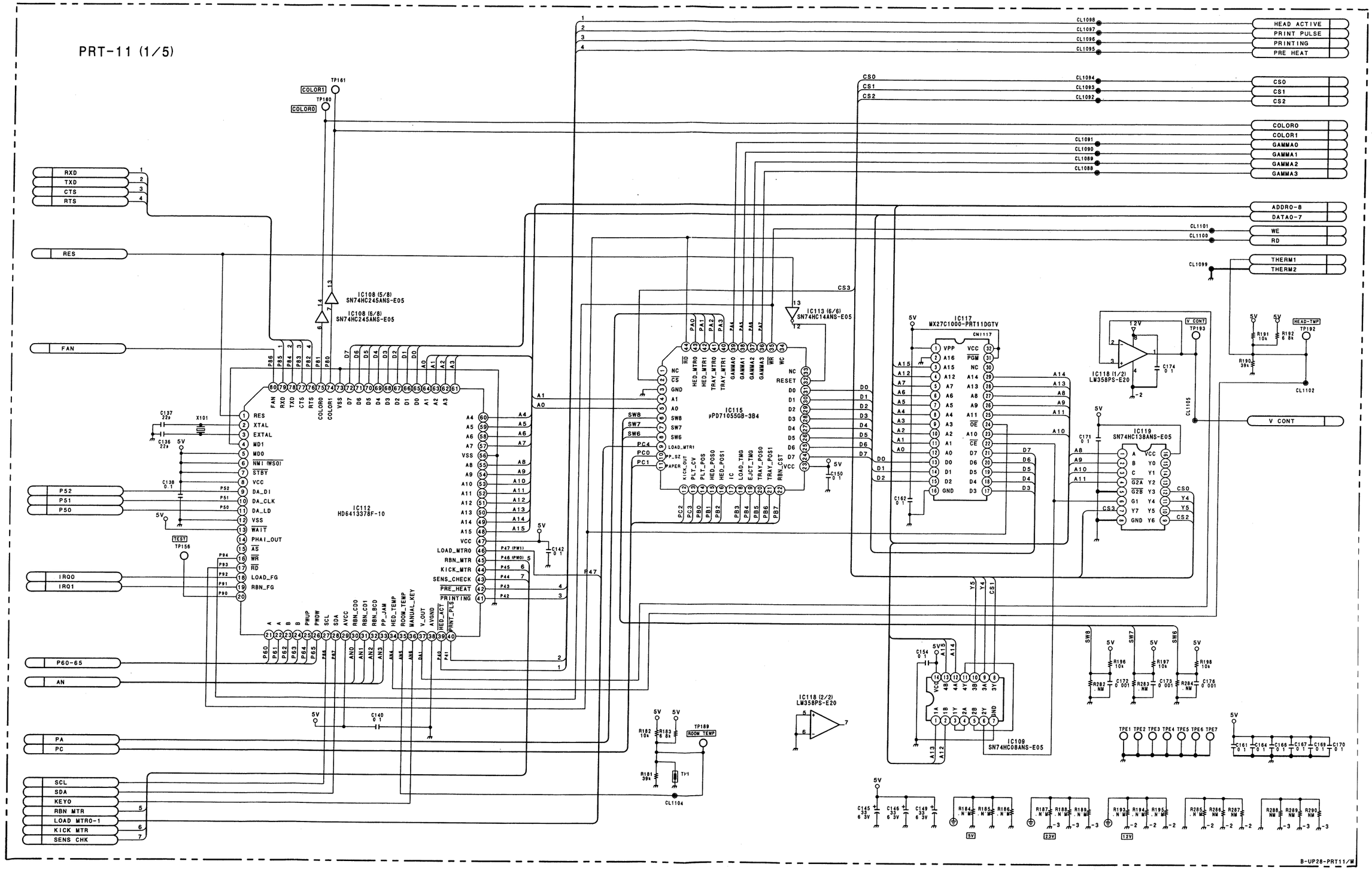
CN1	D-1	IC109	E-1
CN2	I-1	IC110	A-2
CN3	J-2	IC111	C-3
CN4	J-1	IC112	D-2
CN5	J-3	IC113	A-3
CN6	B-1	IC114	D-3
CN7	H-1	IC115	C-2
CN8	G-1	IC117	B-3
CN9	A-1	IC118	E-1
CN10	H-2	IC119	E-2
CN11	H-3	IC201	H-2
CN12	C-1	IC202	G-2
CN13	D-3	IC203	G-1
CN14	F-3	IC204	G-2
CN15	B-1	IC206	E-2
CN16	E-1	IC207	H-2
CN17	I-1	IC208	I-2
CN18	B-1	IC209	G-2
CN101	E-1	IC210	I-3
CN1520	E-1		
CNI117	B-3	Q101	F-3
CNI206	E-2	Q102	A-3
		Q103	D-3
D101	A-2	Q104	B-3
D102	A-2	Q105	B-3
D104	A-2	Q107	A-2
*D223	G-2	*Q110	B-3
		Q111	A-3
IC101	G-3		
IC102	A-2	S1	H-2
IC103	F-2		
IC104	E-3	TH1	D-2
IC105	C-3		
IC106	E-2	X101	C-3
IC107	E-3	X201	H-2
IC108	C-2	X202	J-3

*:B SIDE

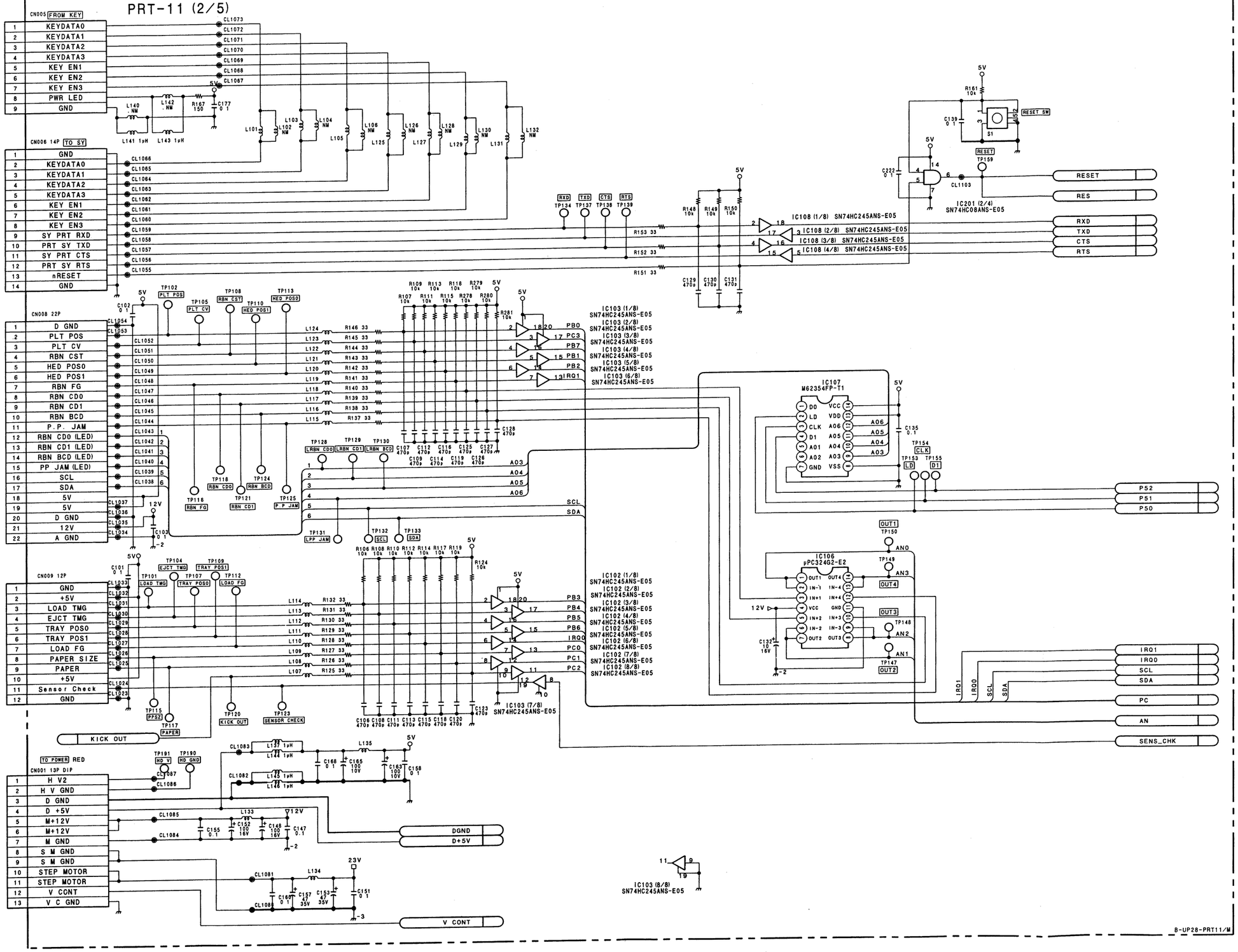


PRT-11 B SIDE
1-666-990-11

PRINT CONTROL



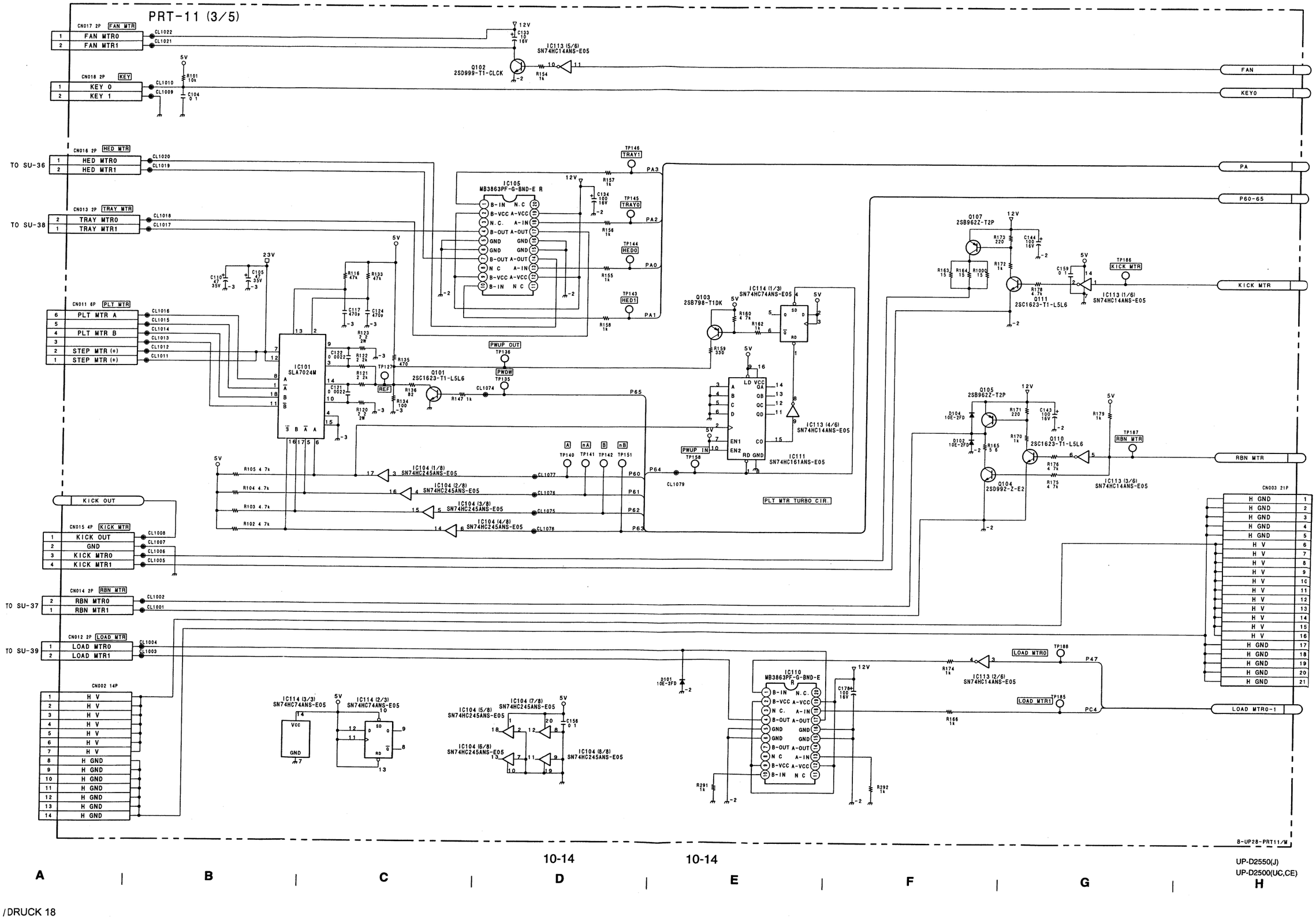
PRT-11 (2/5)



UP-D2550(J)
UP-D2500(UC,CE)

10-13 10-13

SONY-SP0552 / DRUCK 17



10-14 10-14

UP-D2550(J)
UP-D2500(UC,CE)

PRT-11 (4/5)

GAMMA2

CN007 14P TO FMY

1	PRNT D0
2	PRNT D1
3	PRNT D2
4	PRNT D3
5	PRNT D4
6	PRNT D5
7	PRNT D6
8	PRNT D7
9	GND
10	PRNT DCK
11	PRNT DREQ
12	GND
13	COLOR0
14	COLOR1

CN010 14P SIGNAL GENERATOR

1	PRNT D0
2	PRNT D1
3	PRNT D2
4	PRNT D3
5	PRNT D4
6	PRNT D5
7	PRNT D6
8	PRNT D7
9	GND
10	DCK
11	nDREQ
12	nHEAD ACTIVE
13	5V
14	GND

TO JIG & SIGNAL GENERATOR

ADDR0-8

CS0
CS1
CS2
WE
RD
PRE HEAT

DATA0-7

RESET
HEAD ACTIVE
PRINT PULSE
PRINTING

IC108 (7/8) SN74HC245ANS-E05
IC108 (8/8) SN74HC245ANS-E05
IC201 (1/4) SN74HC08ANS-E05
IC202 (1/4) SN74HC32ANS-E05
IC202 (3/4) SN74HC32ANS-E05
IC202 (4/4) SN74HC32ANS-E05
IC203 NM
IC204 SN74HC574ANS-E05
IC206 MX27C1000DC-D25G
IC207 CXD8653Q PICTURE QUALITY CONTROL IC

GAMMA3
COLOR0
COLOR1
GAMMA1
GAMMA0

DREQ2
DCK2
HA2
PP2

RD
DATA0-7
ADDR0-8
RST
PRT

B-UP28-PRT1/M

UP-D2550(J)
UP-D2500(UC,CE)

10-15 10-15

SONY-SP0552 / DRUCK 19

PRT-11 (5/5)

D+5V
DGND
L241 1μH
L242 1μH
L243 1μH
L244 1μH
C231 0.0022

IC208
CXD8636Q
THERMAL HEAD DRIVE IC

IC210
CXD8865R
VOLTAGE DROP COMPENSATION IC

X202
C227 68p
C228 0.1 16V
C229 33 16V
C230 33 16V
C224 0.1
C225 33 6.3V
C226 33 6.3V

RESET
WE
RE
CS1

RD
DATA0-7
ADDR0-8
RST

PRT
THERM1
THERM2

CN004
TO THERMAL HEAD

1	GND L
2	VDD
3	GND L
4	VDD
5	HEAD CK
6	THERM1
7	THERM2
8	HEAD BEO
9	nHED LATCH
10	nHED STRB
11	HED D1
12	HED D2
13	HED D3
14	HED D4
15	HED D5
16	HED D6
17	HED D7
18	HED D8
19	GND L

IC201 (3/4) SN74HC08ANS-E05
IC201 (4/4) SN74HC08ANS-E05
IC209 (1/4) SN74HC02ANS-E05
IC202 (2/4) SN74HC32ANS-E05
IC209 (3/4) SN74HC02ANS-E05
IC209 (2/4) SN74HC02ANS-E05
IC209 (4/4) SN74HC02ANS-E05

HDLATCH TP221
HDCK TP220
HDSTRB TP222

DREQ2
DCK2
DON
HA2
PP2
PDREQ TP239
PDCK TP241
PDACT TP242
PHA TP243
PPP TP245

TPE201 TPE202 TPE203 TPE204

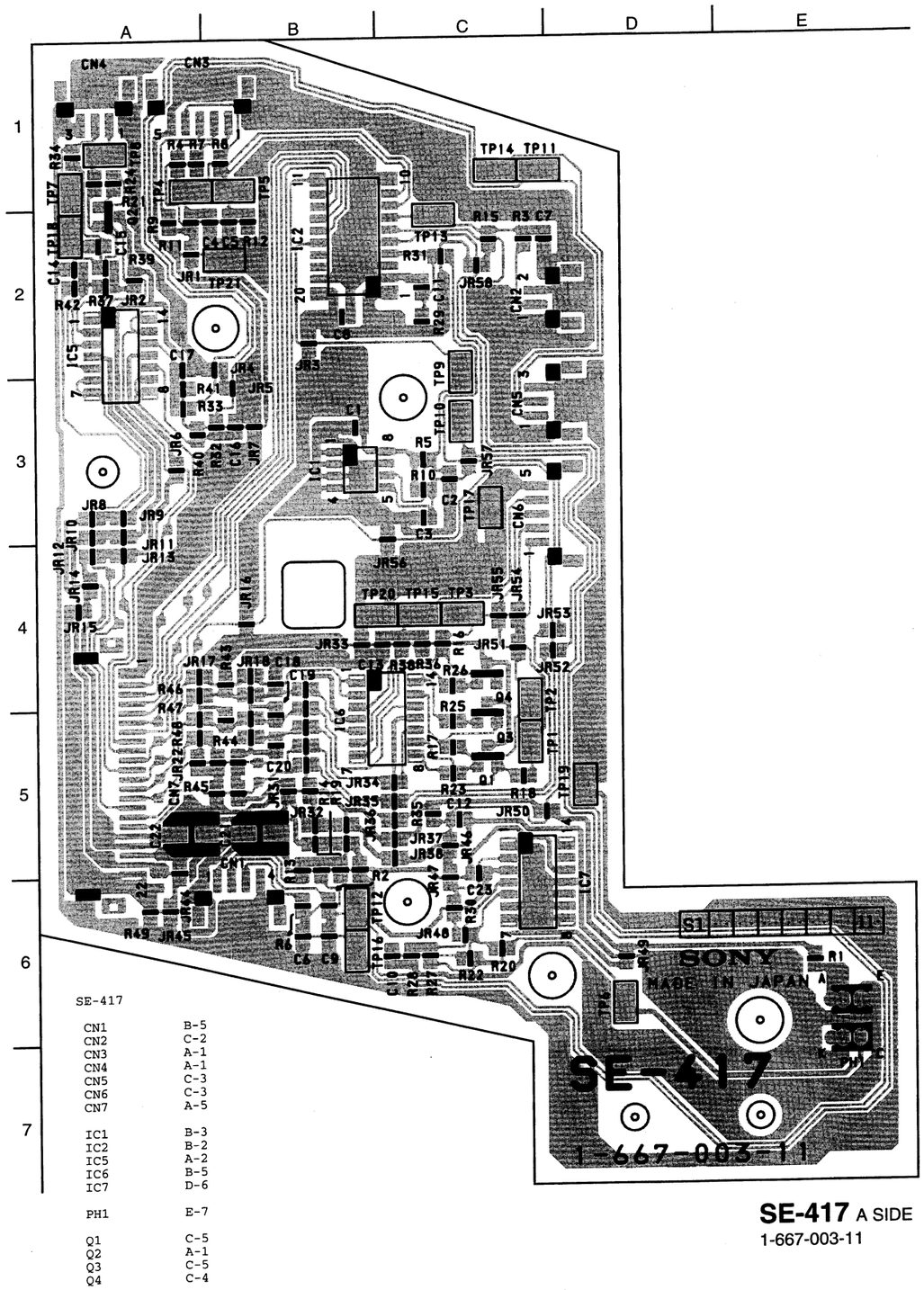
B-UP28-PRT11/M

10-16 10-16

UP-D2550(J)
UP-D2500(UC,CE)

SONY-SP0552 / DRUCK 20

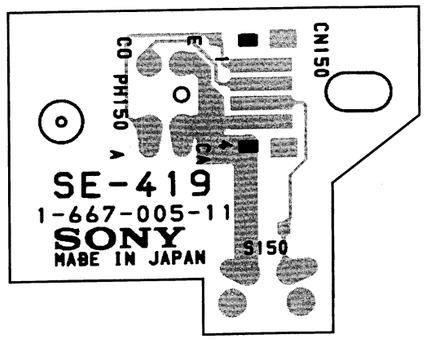
SE-417, SE-419, SE-420, SE-422, SE-423, SE-424, SE-425



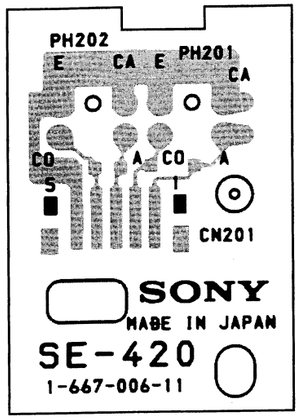
SE-417

CN1	B-5
CN2	C-2
CN3	A-1
CN4	A-1
CN5	C-3
CN6	C-3
CN7	A-5
IC1	B-3
IC2	B-2
IC5	A-2
IC6	B-5
IC7	D-6
PH1	E-7
Q1	C-5
Q2	A-1
Q3	C-5
Q4	C-4

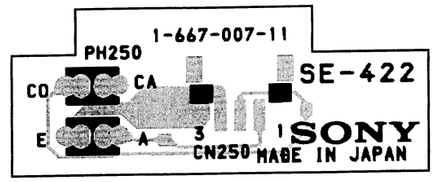
SE-417 A SIDE
1-667-003-11



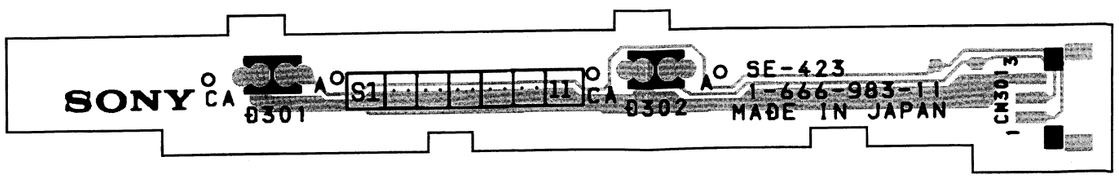
SE-419 A SIDE
1-667-005-11



SE-420 A SIDE
1-667-006-11



SE-422 A SIDE
1-667-007-11



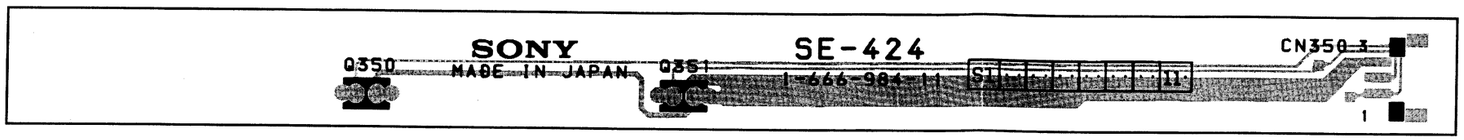
SE-423 A SIDE
1-666-983-11

10-17

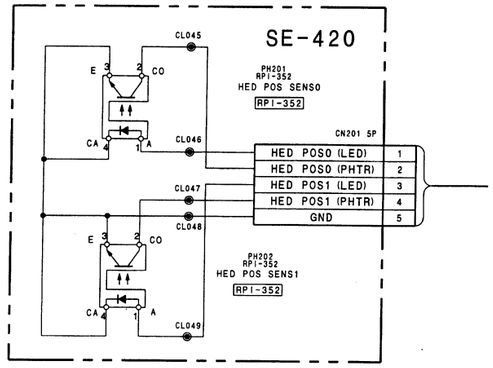
UP-D2550(J)
UP-D2500(UC,CE)

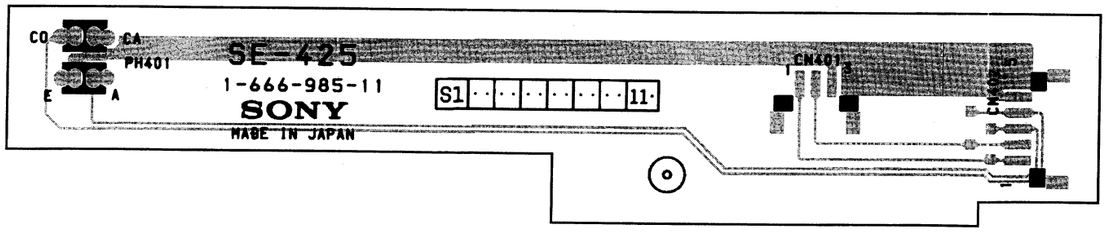
SE-417, SE-419, SE-420, SE-422, SE-423, SE-424, SE-425

SENSOR

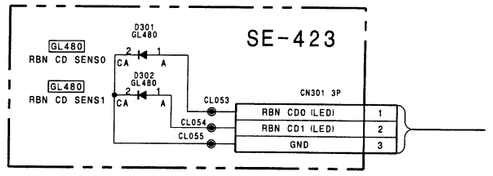


SE-424 A SIDE
1-666-984-11





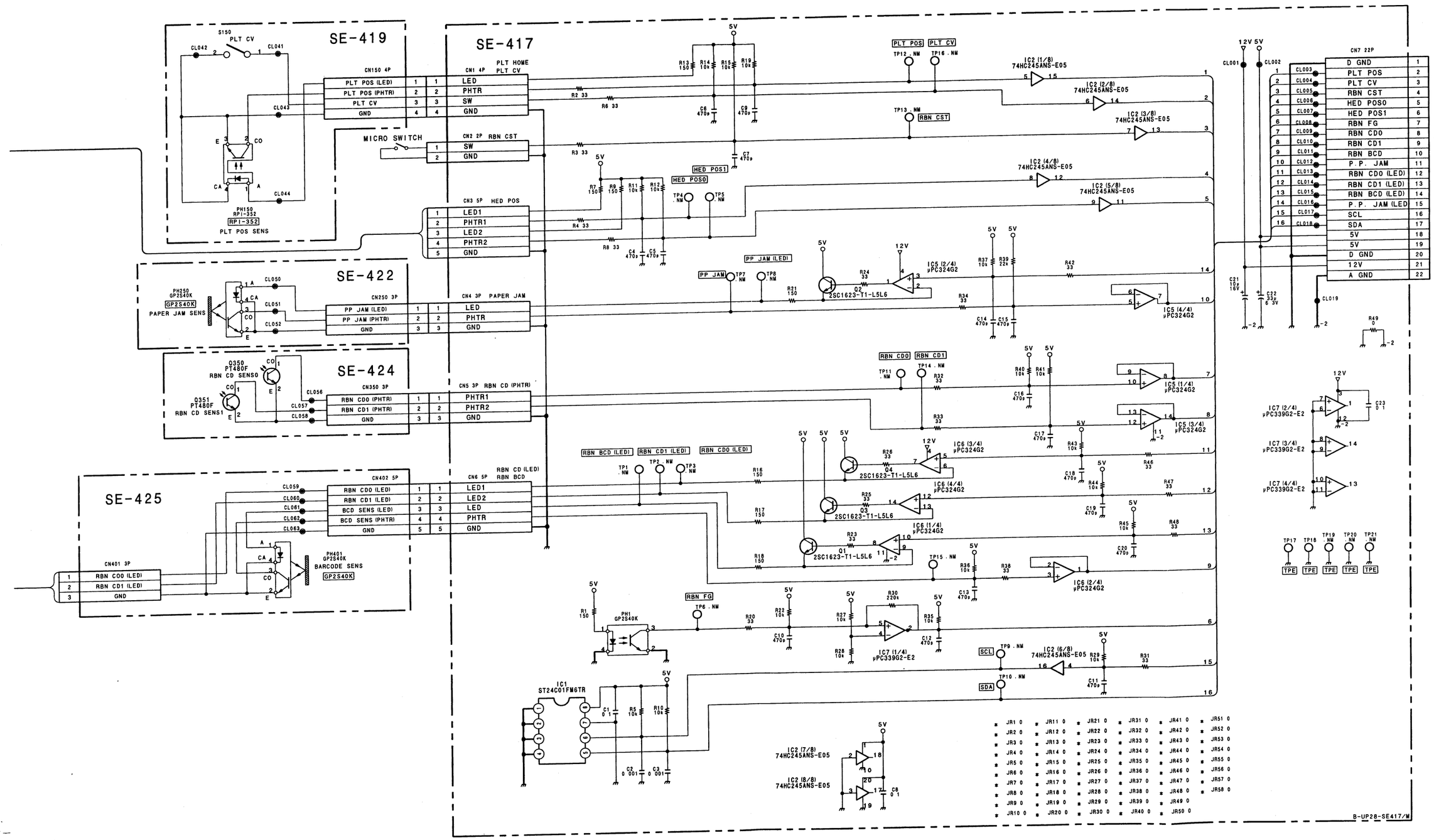
SE-425 A SIDE
1-666-985-11



10-18 10-18

UP-D2550(J)
UP-D2500(UC,CE)

SE-417, SE-419, SE-420, SE-422, SE-423, SE-424, SE-425



UP-D2550(J)
UP-D2500(UC,CE)

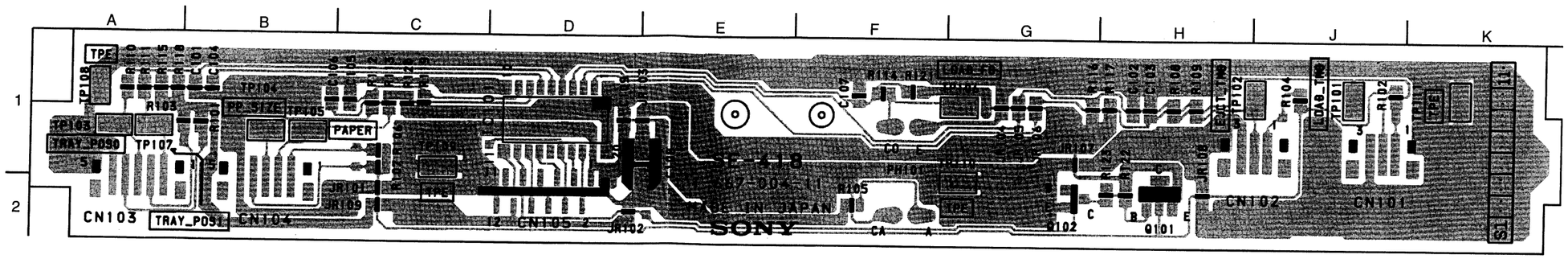
10-19

10-19

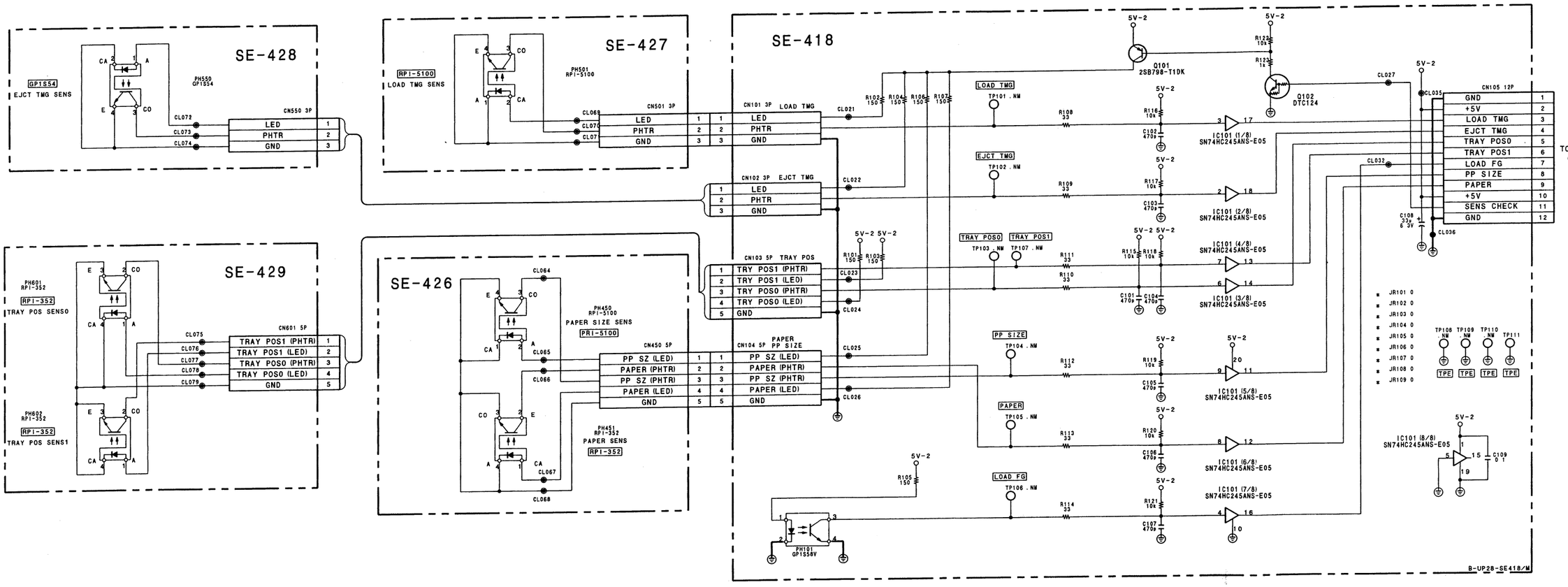
SE-418, SE-426, SE-427, SE-428, SE-429

SE-418

CN101	I-2
CN102	H-2
CN103	A-2
CN104	B-2
CN105	D-1
IC101	C-1
JR101	C-2
JR102	D-2
JR103	E-1
JR104	G-1
JR105	G-1
JR106	G-1
JR107	G-1
JR108	H-1
JR109	C-2
PH101	F-1
Q101	H-2
Q102	G-2



SENSOR


SE-428
GP1S54
EJCT TMG SENS
PH550 GP1S54
CN550 3P
CL072
CL073
CL074
LED 1
PHTR 2
GND 3
SE-427
RPI-5100
LOAD TMG SENS
PH501 RPI-5100
CN501 3P
CL068
CL070
CL071
LED 1
PHTR 2
GND 3
SE-418
CN101 3P LOAD TMG
CN102 3P EJCT TMG
CN103 5P TRAY POS
CN104 5P PP SZ PAPER
CN105 12P
GND 1
+5V 2
LOAD TMG 3
EJCT TMG 4
TRAY POSO 5
TRAY POS1 6
LOAD FG 7
PP SIZE 8
PAPER 9
+5V 10
SENS CHECK 11
GND 12
TO PRT-11 CN009
Q101 2SB798-T1DK
Q102 DTC124
IC101 (1/8) SN74HC245ANS-E05
IC101 (2/8) SN74HC245ANS-E05
IC101 (3/8) SN74HC245ANS-E05
IC101 (4/8) SN74HC245ANS-E05
IC101 (5/8) SN74HC245ANS-E05
IC101 (6/8) SN74HC245ANS-E05
IC101 (7/8) SN74HC245ANS-E05
IC101 (8/8) SN74HC245ANS-E05
LOAD TMG
EJCT TMG
TRAY POSO
TRAY POS1
PP SIZE
PAPER
LOAD FG
PH101 GP1S58V
SE-426
PH450 RPI-5100
PAPER SIZE SENS
PRI-5100
PH451 RPI-352
PAPER SENS
RPI-352
CN450 5P
PP SZ (LED) 1
PAPER (PHTR) 2
PP SZ (PHTR) 3
PAPER (LED) 4
GND 5
SE-429
PH601 RPI-352
TRAY POS SENSO
PH602 RPI-352
TRAY POS SENS1
CN601 5P
TRAY POS1 (PHTR) 1
TRAY POS1 (LED) 2
TRAY POSO (PHTR) 3
TRAY POSO (LED) 4
GND 5
JR101 0
JR102 0
JR103 0
JR104 0
JR105 0
JR106 0
JR107 0
JR108 0
JR109 0
TP108 TP109 TP110 TP111
TPE
B-UP28-SE418/M

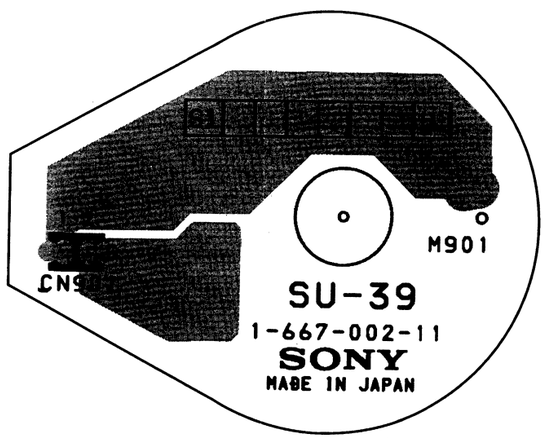
SU-36, SU-37, SU-38, SU-39

MOTOR

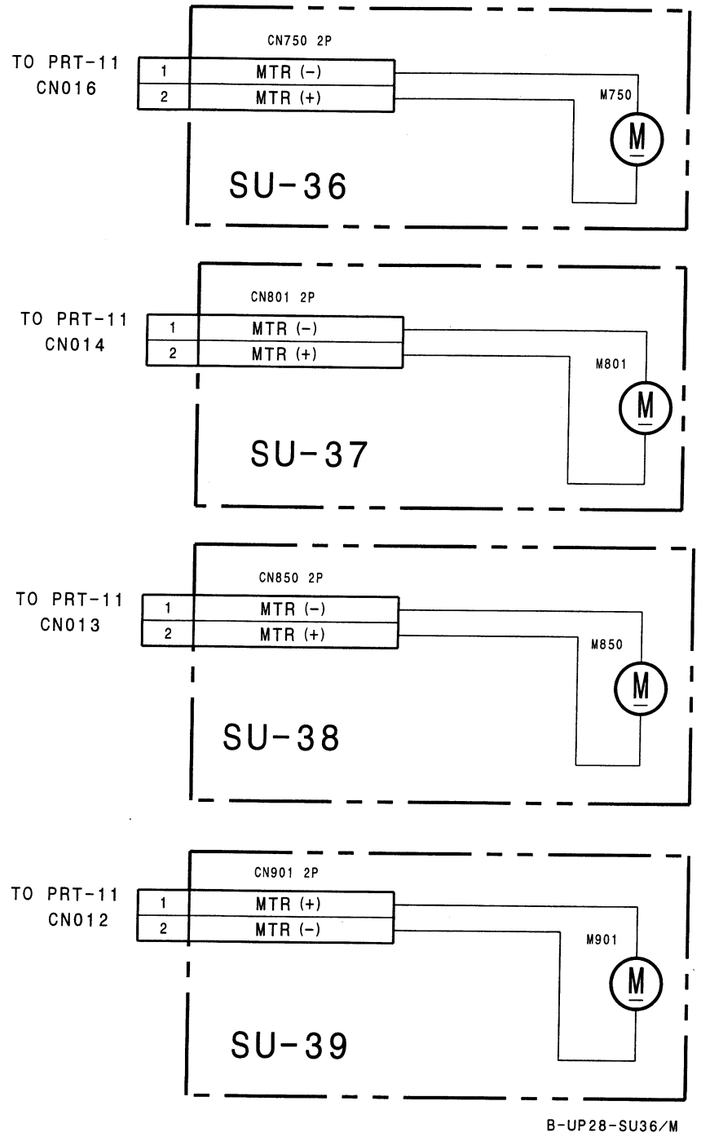
SU-36 A SIDE
1-666-999-11

SU-37 A SIDE
1-667-000-11

SU-38 A SIDE
1-667-001-11



SU-39 A SIDE
1-667-002-11



B-UP28-SU36/M